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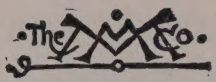
STERILIZATION FOR HUMAN BETTERMENT



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STERILIZATION FOR HUMAN BETTERMENT

A Summary of Results of 6,000 Operations in California, 1909-1929

BY

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AND

PAUL POPENOE, D.SC.

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INTRODUCTION

The human race has developed through countless ages under the laws of heredity by the survival of the fittest. The weak and defective have perished. Only the physically strong and mentally alert could withstand the severe conditions of early life, reach maturity, and become the fathers and mothers of the next generation.

Modern civilization, human sympathy, and charity have intervened in Nature's plan. The weak and defective are now nursed to maturity and produce their kind.

Under Nature's law we bred principally from the top. To-day we breed from the top and bottom, but more rapidly from the bottom. To-day the most intelligent and efficient, the strongest strains of blood, as a rule, limit their children to a point that means the extinction of a family in a few generations.

We need constructive charity along with our present patchwork variety that tends to increase the burdens of race degeneracy and family suicide.

Statistics of the mentally disabled are largely estimates, but conservatively speaking, 4% or 4,800,000, of the people of the United States will at some time in their lives need the care of an institution for mental diseases because of some form of insanity. Of the feeble-minded it is estimated that ½ of 1%, or 600,000, of the people of the United States have a mentality below seven years and need constant supervision and assistance either at home or in an institution. Above this class it is estimated that 1%, or 1,200,000, have a mentality of from seven to nine years. This class, with a few exceptions, cannot get along alone; it must have more or less constant supervision.

Above this comes the more dangerous, eugenically speaking, moron class with its many problems. Los Angeles and other cities have recently made a survey of the children in the public schools, and find that in the first eight grades there are more than 4% of children with less than three-fourths of normal intellect. If we add the ½ of 1% in the first class, and assume that this estimate holds true for the adults, we can conservatively estimate that practically 5% or 6,000,000 of the inhabitants of the United States, have an intellectuality which is less than 75% of that of the average man.

Just how much insanity may be traced to inheritance is a difficult problem, because there is often an exciting cause, an injury, shock, or sickness. The latent heredity develops: family and friends place the blame entirely on the exciting cause.

In the feeble-minded, heredity is more apparent. Some noted families exhibit this in a striking manner, such as the Kallikak family, in which the founder had an illegitimate son by a feeble-minded woman. From this son in five generations were traced 480 offspring, only forty-six of whom were known to be normal. The same father subsequently married a normal woman, from whom in six generations were descended 496 offspring, only one of whom was known not to be normal. In the first family, there were all forms of feeble-mindedness, degeneracy, and crime; in the second there were tradesmen, teachers, preachers, lawyers, judges, and a high quality of citizenship generally.

We might mention other families such as the Jukes, with six generations and 1200 defectives; the Nam family, with 90% feeble-minded; the Zeros, tribe of Ishmael, etc. each family costing its respective state from one to three million dollars.

Ohio, some years ago, published a statement showing that it was then expending $5,000,000

yearly in caring for defectives in its public institutions, and estimated that the civilized world was paying $5,000,000,000 annually for the same purpose.

This cost in money is trivial compared with the heartaches, crime, and horror that find their origin in these defectives. No sane man would wish to bring into life a child so defective that it could not be a self-sustaining, respectable citizen. Such children should never be born. They are a burden to themselves, a burden to their family, a burden to the state, and a menace to civilization. Certainly if anything can be done, which is sanctioned by common sense and good morals, to prevent this accumulation of human misery and degeneracy, it should be done.

What can be done?

The prevention of reproduction by castration has been practiced as far back as we find historic records. But sterilization by the simple surgical operation now practiced and herein described, without mutilation and without unsexing the patient, was discovered only in the last half century. Theoretically it should have no effect except to prevent parenthood, and experience indicates that it has no other effect.

Nearly twenty years ago California, Indiana, and other states passed laws authorizing the sterili-

zation of the hereditary defectives in their state institutions. Most of these laws also carried a provision for sterilization as a penalty for certain crimes. The penal section has generally been held unconstitutional, as in conflict with the provision prohibiting "cruel and unusual punishments."

Eugenic sterilization of the hereditary defective is a protection, not a penalty, and should never be made a part of any penal statute. The United States Supreme Court has recently sustained the legality of eugenic sterilization. In the case of Buck vs. Bell, where a feeble-minded woman who had a feeble-minded mother and a feeble-minded child was to be sterilized against her will, Justice Holmes, in handing down the decision, said, "Three generations of imbeciles are enough."

A score of years have passed since the first sterilization laws were adopted. Thinking people are asking, What have been the actual results of human sterilization? Here in California is the one place where these results have been clearly ascertained. No fewer than 6,255 sterilizations had been performed prior to January 1, 1929, in the institutions of this state—practically three times as many official sterilizations as had been performed in all the rest of the United States. We have traced the records and results of these sterilizations as far as possible, and have published

them in full in a series of technical papers in various scientific journals, so that any one who is interested in going to the original data can find these data, presented in a critical fashion. In the first part of this book, we give a summary of our findings; in the second part, some conclusions to which these findings, and a general consideration of sterilizations elsewhere, have led us.

State officials and medical staffs of these institutions have coöperated heartily in our research. These officials and staffs deserve great credit for the sane, conservative, and diplomatic way in which they have handled the administration of the sterilization laws.

The value of research such as this depends upon the manner in which it is done, and therefore upon the qualifications and efficiency of the parties doing it. This requires a personal statement. Having determined to make this research, it was not easy to find the right man to put in charge. Three years ago, we employed Paul Popenoe to take charge of the work. Some knowledge of his qualifications and standing is necessary for a proper estimate of the thoroughness and reliability of these publications.

Mr. Popenoe grew up in California, received his college training at Occidental College and Stanford University, was for several years engaged in

newspaper work, as city editor of one of the Pasadena daily papers; he resigned this position to become agricultural explorer in northern Africa and the Orient. He gave up this position to become editor of the *Journal of Heredity* in Washington, D. C., in 1913. When America entered the World War he resigned this position to join the field forces as lieutenant; later he was attached to the staff of the surgeon general of the army and as captain was placed in charge of the enforcement of the laws prohibiting prostitution and the sale of intoxicants in the vicinity of the soldiers' camps, which position he held until the close of the war. He was then made executive secretary of the American Social Hygiene Association in New York, which position he resigned a few years ago and returned to California to pursue more intensively his studies of eugenics and heredity. He is the author of many magazine articles on these subjects and of five standard books on eugenics and heredity. Our executive board agree with me that we were most fortunate in securing Mr. Popenoe for this enterprise.

In this work, we have also had the coöperation and aid of many students of eugenics and heredity throughout this country and in Europe, besides the active assistance of an advisory board consist-

ing of the late Dr. J. H. McBride of Pasadena, Dr. George Dock of Pasadena, Henry M. Robinson of Los Angeles, Chancellor David Starr Jordan and Professor Lewis M. Terman of Stanford University, Professors S. J. Holmes and H. M. Evans of the University of California, Dean Justin Miller of the College of Law, University of Southern California, Otis H. Castle and Joe G. Crick of Los Angeles and Pasadena, and C. M. Goethe of Sacramento. Every manuscript has been submitted, before publication, to each of the members of this board, as well as to a large number of other consultants for whose advice and suggestions we are grateful.

We are particularly indebted to Dr. Robert L. Dickinson, secretary of the Committee on Maternal Health, for putting at our disposal his wide knowledge and long experience in the medical and surgical aspects of sterilization; to Dr. H. H. Laughlin, superintendent of the Eugenics Record Office, who has followed the development of sterilization in the United States more closely than any other student; to the American Eugenics Society for constant and hearty coöperation, and to Major Leonard Darwin, honorary president of The Eugenics Society (London), for his active interest and encouragement.

Our publication and research work is now

turned over to the Human Betterment Foundation, which was organized for the purpose of completing and perpetuating this and other constructive work, not repair work, along the lines indicated by the name. (See Appendix IX.)

SUMMARY OF THE RESULTS

Of the 6,255 sterilizations in California state hospitals there were 601 more males than females.

In the feeble-minded sterilizations, 1,488 in all, there were 330 more females than males. All feeble-minded patients are now sterilized before they are allowed to leave the state home at Sonoma.

One in twelve of all the insane admitted to the state hospitals since the law was passed has been sterilized. One in five or six of the new admissions is now sterilized.

Sterilization is done only where there is apparent danger of defective children.

FAILURES

Of the entire sterilizations in the state, there are three known failures in the male (vasectomies). There are four known failures in the female (salpingectomies). This is a much higher percentage of efficiency than that recorded in other

places of this country and Europe, and shows the expertness of the work.

In all of the sterilizations of the state institutions of California, there have been only four deaths, two of which resulted from the anesthetic and two from infection. One of these, a feeble-minded girl, tore the dressings off from the wound and doubtless infected herself.

ATTITUDE OF PATIENTS AND THEIR RELATIVES

Consent of the nearest relatives is always obtained when practicable, and this consent to the sterilization becomes more easy to obtain from year to year as the effects and results are better understood.

Of the insane patients sterilized, six out of every seven replying to inquiries were satisfied with the operation. One out of every seven expressed dissatisfaction, but their complaints were not of a serious nature. Most of the dissenters felt that sterilization would be a good thing for the defective or mentally diseased, but that it did not apply to their cases—such complaints only as one would expect from a mentally unbalanced person. No serious dissatisfaction was found among relatives. Social workers of the state seemed to be virtually unanimous in their commendation of the results.

CONDUCT ON PAROLE

Of the feeble-minded on parole, two-thirds have gotten along satisfactorily, one-third have been failures due chiefly to dullness and objectionable personality.

We have paid special attention to the problem of the effect of sterilization on sexual promiscuity. Among the paroled feeble-minded, we have found no male charged with sex offenses. One in every twelve of the females paroled after sterilization becomes a sex offender, but nine out of twelve in the same group were sex offenders before commitment to the state institution. This improvement is not wholly due to the effect of sterilization, but is doubtless attributable in part to the training they received in the state institution and to the fact that they know they are on parole and will be returned to the state institution if they do not behave themselves.

EFFECT ON THE LIFE OF THE PATIENT

Sterilization destroys no organ or gland of the body. Our investigations show that it has no effect upon sex desire, sex performance, or sex feeling of the subject, except a favorable psychological effect in some cases, particularly where the fear of pregnancy is removed.

MARRIAGE

More than 125 feeble-minded, sterilized girls on parole have married. The majority have turned out well. These girls could not have succeeded if they had been burdened with responsibility for the care of children, particularly of feeble-minded children.

PRIVATE STERILIZATION

Probably as many women have been sterilized in private practice as in state institutions. These have mostly been because of bad hearts, bad lungs, or bad kidneys, rendering childbirth dangerous to the life of the mother. Many hospitals now refuse to perform abortions unless they sterilize at the same time. We feel that the time has come when there should be some form of state supervision over all sterilization.

THE LAWS

The present statutes of most states need amendment. In the appendix to this volume will be found a summary of the statutes and decisions on this subject in the various states, quoted from an address by Otis H. Castle of Los Angeles, before the American Bar Association at Seattle in July, 1928.

E. S. GOSNEY

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PART I

THE FACTS

STERILIZATION FOR HUMAN BETTERMENT

CHAPTER I

THE PROBLEM

For half a century, since serious attempts were first made to get an accurate census of persons with mental diseases in the United States, the number has been found to be increasing, steadily and rapidly. The number of known mentally diseased persons is now three times as great, in proportion to the total population, as it was in 1880.

Much of this increase is due to better diagnosis and the fact that more attention is being paid to the subject. Some of it is due to the fact that people are now living longer than formerly, hence mental diseases that appear only after middle life are more likely to be prominent. A significant part is due to the immigration of people who are mentally weak, or at least do not prove capable of adjusting themselves to the complicated surroundings of city life in America, even though they

might have been able to get along quite well in the simple peasant life of the old country. Similarly, migration from the country to large cities may increase the number of breakdowns, the rate generally being about twice as high in urban as in rural districts.

But even if all the increase were due to such causes, even if none of it represented an actual increase in the amount of defective stock in the older part of the population, the fact remains that modern science has made little or no progress with this type of disability, and that the problem is becoming greater year by year.

The gravity of the situation is not measured by the mere fact that there are 300,000 patients in the institutions of the country each year. Many of these do not stay long; the turnover is rapid. Of every two patients admitted in a year, at least one is released—usually to return later, for of those discharged as recovered, it is calculated that not more than one-fourth are permanently recovered. For the others, it is merely an intermission.

Of those thus discharged as recovered, half have been in the hospital no more than six months, three-fourths for less than a year. This means that the number of persons who will, at some time during their lives, enter a hospital for mental dis-

eases as patients, is vastly larger than the 300,000 to be found there in any one year. Calculations show that it is actually something like four in each hundred of the population, or 4,800,000 of the citizens of the United States who, before they die, will be classified as "insane."

A century ago, or even much less, the patient who was seriously ill mentally was isolated and tied up and his disease was almost always aggravated by the treatment he received. In short, once committed to an institution, he was a hopeless case. There was little chance that he would return home to produce more children.

The progress of medicine has made the lot of these sufferers less wretched. By good care and kind treatment, many of them, as noted above, make at least temporary recoveries; and the policy of modern hospitals is to parole them, as soon as it is feasible to do so, back to their own homes and among their relatives. This means, if they are married, that they go back to their wives or husbands, as the case may be, and frequently it means that they have additional children. Their defective constitutions, in so far as these are due to heredity, are thus passed on to still more of their descendants.

That these defects are already widely scattered through the germ plasm of the nation is indicated

by the fact that most of the people who break down mentally are not the children of persons, either one of whom has ever had an actual mental breakdown. They come of families that carry this weakness, however, and the union of two weak strains produces a child who, subjected to the necessary stress, gives way.

The sterilized insane studied in California would not have enough children to perpetuate their own numbers, even if not sterilized. Higher birth rates have been reported elsewhere, and a widespread investigation should be made to get at the facts on this point. The fecundity of the insane is cut down partly by hospital residence, partly by voluntary action on their part, partly because their lives are shortened by their diseases —the life expectation of the adult insane is perhaps no more than one-half that of normal individuals.

If the insane do not have enough children to reproduce their own numbers, then it is clear that the constant stream of new admissions to the hospitals, so far as it is due to heredity, must be largely due to matings of persons who are not themselves insane, but who carry insanity in their germ plasm. This means that they have insane ancestors; likewise insane collateral relatives, in most cases. The number of persons who are them-

selves not much affected mentally, but are yet carriers of a heritage that may lead to mental disease in their descendants, is probably much greater than is the number of those who are themselves affected. Few if any of these carriers can be identified beyond doubt, but the number is demonstrably large; they are spreading defective germ plasm continually through the sound part of the community, and many of them can be pointed out with probable accuracy through a study of their ancestry.

MENTAL DEFECTIVES

When one turns to the mental defectives, the situation is no more reassuring. These are the people whose minds have not developed in the normal way. The mentally diseased person ("insane") has at some time had a better mind which has broken down under strain. The mentally defective ("feeble-minded") person was defective from birth or early childhood.

It is customary to measure the intellect by standard tests such as the Binet, and to express the result in the form of an Intelligence Quotient (I. Q.), which is the ratio of the mental age to the chronological age. Thus a ten-year-old child who passes only the tests that the ordinary five-year-old can pass has a mental age of five years,

and an I. Q. of 50. The twelve-year-old who is mentally on a level with the nine-year-olds has an I. Q. of 75. The child who is up to the standard of his age is normal, with an I. Q. of 100, while the superior child of eight may be doing the work of a ten- or twelve-year-old, and have an I. Q. of 125 or 150, as the case may be. For adults, fourteen or sixteen is usually taken as the age beyond which there is no development of the inborn intellect, and adult-intelligence quotients are figured on that base. The tests expressed in the I. Q. relate, for the most part, only to abstract or verbal intelligence. There are other types of intelligence that may be just as useful, or more so, to the child in getting along pleasantly in the world and making a living; for instance, mechanical intelligence and social intelligence. But since educational progress and racial progress both depend largely on the more abstract type of intelligence that figures in the I. Q., it is not altogether wrong that this should be made the basis for the conventional determination of feeble-mindedness.

From this point of view, any one with an I. Q. of less than 70 has sometimes been called feeble-minded. He has less than three-fourths of the average amount of intellect, and while he may get along, usually does get along, passably if he is emotionally stable, if his problems are not too

difficult, if he does not have to solve the problems of others, if he has proper guidance, and if he is not subjected to unusual strain or temptation; yet he is incapable of dealing intelligently with new difficulties, and is always subject to exploitation by some abler and unscrupulous person.

Tests made on large groups of school children in various parts of the country show that four or five per cent fall below 70 I. Q.; that is, they are feeble-minded in this conventional and technical use of the term. The mental tests of the national army, embracing a couple of million men, showed an even higher percentage—about six per cent—falling below this line. If it be assumed conservatively that four per cent of the whole population would fall below this line, then there are 4,800,000 persons in the United States who are technically feeble-minded, of whom not more than 60,000 are in institutions.

Many of this great number are useful and law-abiding citizens, even if not brilliant. Their neighbors never think of them as mentally defective. But from their ranks come more than a fair proportion of the delinquents and law-breakers, and an overwhelming proportion of the dependents. It is they who absorb the taxpayers' money in public and private charities.

So far as reproduction is concerned, they are

perpetuating themselves much more fully than the mentally diseased, and much more fully than the intellectually superior. Their birth rate is equal to that of the population as a whole, if not higher. Under present conditions, therefore, they will be found in larger and larger numbers in each succeeding generation.

Since there is little overlapping of the two groups, the number of persons in the United States who are definitely inferior mentally, either because of disease or because of deficiency, must be nearly 10,000,000.

BODILY DISABILITIES

When one turns from mental disability to physical disability, the picture is no more pleasing. Groups such as the blind, 75,000 in number; the deaf, 100,000 in number; the crippled, whose number is put as high as 700,000, represent for the most part the victims of accident or disease which cannot be transmitted to posterity; but some at least of the two groups first mentioned owe their condition to inheritance and many of them could not care for or train children properly. The tendency of the deaf to marry among themselves emphasizes the importance of inheritance by giving the offspring a double dose of any hereditary defects that may be present. The

really large groups are those disabled by bad lungs, hearts, kidneys, and the like; by cancer; or by some other handicap that may terminate fatally and at the best will seriously impair earning capacity and jeopardize happiness, while also crippling their efficiency as parents and penalizing their offspring.

It is estimated that about 300,000 persons are now affected with cancer in the United States, that the number who die annually from this affliction is 100,000, and that of the adult population, at the present rates, one in ten will die of cancer. Nearly half a million persons die each year from degenerative diseases that affect the heart, arteries, or kidneys. Finally, it has been shown that virtually every one, under urban conditions, is infected with tuberculosis at some time, usually in early life, although nine out of ten die of something else.

In the mental and physical handicaps described in this chapter, a large part is played by heredity. It is greater in some cases than in others. Sometimes it may not be involved directly at all; at other times its effect may be overwhelming.

It is no part of our purpose to discuss in detail the exact place of heredity in any of these affections at present. There are many cases in which there is room for doubt. There are also many

cases in which there is no reasonable ground for doubt; in which virtually every one qualified to hold an opinion in the matter would agree that the inheritance was so marked that the children of the individual in question would only be a burden to their parents, to the commonwealth, and to themselves.

It is the class last mentioned with which we are now concerned. The facts brought out by this investigation and reviewed in these pages prove that there is a means available for preventing reproduction in such cases, and that it is the duty of society to allow such prevention to be made. That the means referred to—sterilization—is satisfactory has been demonstrated by thirty years of test, including twenty years on a large scale in California. To describe the results of California's experience is the purpose of the first part of this book.

CHAPTER II

THE HISTORY OF STERILIZATION

If by sterilization be understood a method of preventing parenthood without altering the sexual life of the individual—and the word will be used only in that sense in this book—then sterilization is distinctly a product of modern science, and was not found in any age earlier than the present.

Crude attempts to promote eugenics by more radical measures than sterilization are indeed found as far back as history records; even before, since legend relates that the mythical Queen Semiramis of Nineveh had weak and sickly males of her kingdom castrated in order that the racial stock might not deteriorate.

Most of the precursors of sterilization depended on the asexualization, in a more or less radical way, of the individual. There are few peoples and few parts of the earth in which castration of one sex or of both has not been reported, either as an adjunct to prostitution, or to harem management, or as a punishment. The latter was

usually based on an extension of the principle of retaliation, "An eye for an eye, a tooth for a tooth," as in the case of Abelard and Heloïse. Sometimes the eugenic grounds were also considered, as when a traveler, visiting Palestine in the thirteenth century, reports that thieves were castrated there "in order that they might not beget sons who would be criminals like their fathers."

On the whole, the interests of eugenics seem to have played little part in these various measures; but with the arrival of what might be called early modern times, the eugenic aim began to be emphasized, in connection with the crude methods then available. Johann Peter Frank, a German physician and philosopher who was one of the precursors of the modern eugenics movement, urged in 1779 that the mentally diseased and mentally deficient be castrated to prevent the deterioration of the race. In the last half of the nineteenth century a good many discussions of the advisability of sterilizing defectives appear in medical journals, and several suggestions are made of less radical measures than castration, for this purpose.

About the middle of the nineties, forty-four boys and fourteen girls in the Winfield, Kansas, State Home for the Feeble-minded were castrated by Superintendent F. Hoyt Pilcher. There was

no law authorizing this, and public sentiment forced its cessation.

STERILIZATION IN AMERICA

In 1897 a eugenic sterilization bill was introduced in the Michigan legislature and failed of passage by only a few votes. Two years later, in 1899, Dr. Harry Sharp at the Indiana State Reformatory began systematic sterilization of boys with a new method, vasectomy (see Chapter IX) which had none of the disadvantages of castration. While this was done without any legal warrant, it marks the beginning of eugenic sterilization in the United States as at present understood.

The first sterilization law passed by an American legislature was that of Pennsylvania in 1905; but it was vetoed by the governor. The first law adopted was that of Indiana in 1907. In 1909 Governor Thomas R. Marshall gave notice that he would veto the appropriations of any institution that carried on sterilization, as he personally was opposed to it. Thereafter only an occasional operation was practiced surreptitiously, and in 1920 that law was declared unconstitutional. In July, 1911, when sterilization in Indiana had practically ceased, it was stated that 873 males had been sterilized to date. In 1925 the state institu-

tions reported that they had performed a total of 120 vasectomies under the law. If these figures are both correct, 753 vasectomies were performed prior to the adoption of the law.

Washington adopted a eugenic sterilization law in March, 1909, just a month after a similar bill passed by the Oregon legislature had been vetoed by the governor. A month later (April 22, 1909) California adopted its first statute, which has since been amended and modified on several occasions. These two states have had sterilization laws in effect ever since, and as the Washington statute has been virtually unused, California has the longest continuous record of sterilization of any state in the world, the total number of operations up to January 1, 1929, being 6,255.

Since then, bills for sterilization have been introduced into the legislatures of most of the states, and have been adopted in a majority. In some instances they have later been declared unconstitutional, because of the way in which they were drawn. On July 1, 1929, the following twenty-two states actually had sterilization laws on their books, ready for use:

Arizona, California, Connecticut, Delaware, Idaho, Iowa, Kansas, Maine, Michigan, Minnesota, Mississippi, Montana, Nebraska, New Hampshire, North Dakota, Oregon, South Dakota,

Utah, Virginia, Washington, West Virginia, Wisconsin.

In most of these cases the law has either not been put into effect, or the number of operations performed under it is so small as to be negligible. A few hundred each have been done in Wisconsin, Kansas, Nebraska, Minnesota, and Oregon. California, having more than twice as many cases on record as all the rest of the United States put together, offers a unique opportunity to find out just how sterilization works out in practice.

The failure of many states to make effective use of sterilization laws which they have adopted is due in part to lack of public demand, but frequently also to uncertainty as to the legal status of the law. Many of the earlier laws were so drawn as to conflict unnecessarily with constitutional provision. In 1927, the constitutionality of the principle of eugenic sterilization was established by the United States Supreme Court in a decision on a case from Virginia, and this authoritative pronouncement led to an increased interest in the subject in many parts of the Union.

STERILIZATION ABROAD

Several Canadian provinces have considered sterilization laws, and one of them, Alberta, adopted early in 1928 a law providing for the

voluntary sterilization of certain inmates of provincial institutions. The British Columbia legislature appointed an investigating committee which reported favorably on the desirability of a sterilization law.

Abroad, sterilization has hitherto been a matter of private initiative, with Switzerland leading the way. In 1907 four patients (two men and two women) in a Swiss asylum were castrated, with their own consent and that of the officials, though without any definite legal authorization. These were the first official operations in Europe of a quasi-eugenic nature. Since then there has been a steady, though small, activity of this sort in the Swiss mental hospitals.

The war, with its tremendous damage to racial stocks and its succeeding misery, brought eugenic prospects very much to the fore in European countries, with a resulting increase in interest in sterilization. Sweden appointed a committee to investigate, which reported in favor of the procedure, and this will probably be embodied in law in the near future. England has been discussing the question actively for some years, but has yet taken no official action. In Germany the discussion has been even more active, and as the German law seems not to interfere with sterilizations made with the consent of the patient or (if he

is not legally competent) of his near relatives or guardian, scattered sterilizations have been performed in many places and more systematically, as part of a eugenic campaign, in the Saxon community of Zwickau, where more than one hundred operations are recorded.

Sterilization as now understood thus represents a long evolution, as do all other aspects of civilization. The growth of surgical science on one side has provided a suitable method; the growth of eugenic consciousness, on another side, has caused a demand for the application of such a humane method; the growth of humanitarian feeling has been no less important. First, this brought about the rejection of the violent and mutilating measures that were used in an earlier day. Second, it recognized that many defective or diseased individuals need protection from the strain of bearing and rearing children. From such sources, sterilization has come into being.

With more than thirty years of actual practice in the United States, with perhaps 10,000 cases on record in state hospitals (counting those which have been done without specific legal authorization); with thousands of cases (nearly all of women) also on record in private practice; with a Supreme Court decision upholding it; sterilization may be well said to have passed the experi-

mental stage in North America. Even though its application so far has been extremely limited, it has been accepted, in communities where it has been tried extensively, as an integral part of the state's machinery for dealing with the problems of social welfare and eugenics.

CHAPTER III

EFFECT ON SEXUAL LIFE

STERILIZATION produces no change in the sexual life. No organs or glands are removed; no feelings are altered.

We have tested this fact in a variety of ways, and each time the great bulk of the evidence is the same. There are a few unusual cases, which are to be interpreted according to the circumstances.

The question whether sterilization affects the sexual life was asked of fifty-four physicians and surgeons who have performed sterilization operations either in institutional or in private practice, over periods of time extending up to a quarter of a century. Four of these did not express an opinion; thirty-eight said that there was no change in the patient's sexual life.

Seven said that the operation was sometimes followed by an increase in sexual activity and pleasure. This is natural enough, especially in the case of women who have been mentally dis-

turbed, and have been antagonistic toward pregnancy for fear that it would precipitate a breakdown. The removal of this fear makes a normal sexual life possible. In other cases, the patient's physical as well as mental condition is improved by a stay in the hospital, and the sexual life benefits as do all other bodily functions. The operation should not receive credit for this, though it may occasionally deserve credit indirectly, as when it permits the making of needed repairs to the woman's reproductive organs which otherwise might not have been made.

THE MENTALLY DEFECTIVE

Five physicians thought that in some cases sexual activity was diminished. It is significant that three of these were associated with an institution for mental defectives. We found that the girls in this institution knew it was to their interest to report a diminution of sexual desire, because most of them arrived with bad records of sexual delinquency, and they hoped that they would be released on parole sooner, if it appeared that they were not so likely to offend in the same way. Beyond this, many of them arrived highly oversexed, and the healthful routine of the institution very likely tended to regularize them—the operation was merely incidental.

Even here, however, of eighty-nine girls directly interrogated, only twelve reported a decrease in sexual inclination, and seven reported an increase, while seventy stated that they could notice no change.

Our studies and inquiries of these girls under more favorable circumstances—namely, after they left on parole and were married—gave no room for doubt that they retained full use of their sexual capacities. The other two physicians who reported a decrease had dealt only with private patients, and may have had women patients whose sexual life was declining anyway, because of ill health, advancing age, and other causes.

THE MENTALLY DISEASED

Direct expression of opinion was had from thirty-five male patients who had been sterilized at the state hospitals for mental diseases. Of these twenty-one said they saw no change whatever, nine reported that there was an increase in sexual desire and satisfaction, five told of a decrease. Four of these five had been out several years—two of them for more than ten years—and increasing age would naturally lead to a diminution of sexual activity, particularly as they were not healthy men but men who had had such

a complete breakdown as to lead them to spend some time in a state hospital.

Similar responses from one hundred and nine female patients showed that seventy-eight saw no change whatever, while twenty-two noticed an improvement of the sexual life. Nine reported a decrease, which is probably to be accounted for in ways similar to those already mentioned. In short, of one hundred and nine women, one hundred said either that there was no change at all, or that any change was for the better.

But the testimony of the mentally deficient and mentally diseased is not the most satisfactory, even if the latter have recovered sufficiently to return to their own homes. We have a corroborative body of evidence, on a larger scale, from mentally normal persons who have been sterilized in private practice.

TESTIMONY OF NORMAL MEN

It has been pointed out elsewhere that the operation used in sterilizing males—namely, vasectomy—is exactly the same as that which has been widely exploited for rejuvenation and the restoration of "lost manhood." Whether these claims are correct or not, they could hardly have been made if the operation resulted often in a diminution of sexual potency. And as a fact, whatever

the explanation may be, many men who have undergone the operation for the purpose of rejuvenation testify that their sexual life has been improved.

We have more confidence in the detailed statements which we ourselves have collected from sixty-five men who have been sterilized in private practice. These men are for the most part of a high type of intelligence, largely professional or business men; they were sterilized in most instances not because of any physical or mental defect of their own, nor because of sexual debility, but merely to prevent future pregnancies of their wives; hence their evidence is as nearly ideal as could be found.

These men ranged in age from eighteen to seventy at the time of the operation, the average being nearly forty-two. The time that had elapsed since the operation, when they made their reports, ranged from a few months up to twenty years, the average being more than five years.

Merely because of their age, then, some of them might begin to find a lessening of sexual activity. But only two state that they noticed a definite decrease in virility following the operation, and neither of these decreases was great. One of these men feels well satisfied with the operation; the other, who regrets it, is shown by his history to

be a definitely abnormal individual, and his case may fairly be excluded for that reason. If so, there remains but one man out of the sixty-four who thinks that he is less highly sexed than before the operation, while nine state that they have been more highly sexed since the operation. The remaining fifty-four say that the operation made no change whatever in them.

In reply to the direct question, "Knowing what you now do, if you had it to do over again, would you have the operation performed?" sixty-two unhesitatingly answered "Yes." One failed to answer this question, but in reply to other questions stated that he was well pleased with the results of the operation; he may therefore be counted in the affirmative. Only two of the sixty-five stated that they would not have the operation done; one of these is the physically and mentally abnormal individual already mentioned; the other is a drunkard who underwent vasectomy ten years ago because his wife, worn out by repeated pregnancies, gave him his choice between this and divorce. While the operation kept the family together, he has always been indignant that he gave in to her; and he would not take the trouble to be vasectomized voluntarily, since the burden of bearing children did not fall on him personally. As she puts it, "He is still grouchy about it."

The fact that this group of intelligent men, after years of experience of vasectomy, are virtually unanimous in saying that they would have it done over again, if the question arose, is the strongest possible argument in favor of the operation.

Do the wives of these men approve of the operation? With a single exception, they do, nearly all of them enthusiastically. The exception is a woman, unhappily married, whose husband is unfaithful to her; she thinks that sterilization has made him less fearful in violating the marriage vows and wishes that he were not sterilized so that he might undergo more mental distress. So far as the relation of his sterilization to her own life is concerned, she is pleased.

The testimony in favor of vasectomy, then, from normal, intelligent men, who have undergone the operation voluntarily, is as nearly unanimous as one could possibly expect, as to the satisfactory results and the lack of any undesirable results.

TESTIMONY OF NORMAL WOMEN

Histories of 420 normal women who had been sterilized in private practice were also gathered, and details were gotten as to the sexual life of 165 of these, either through (in the majority of

cases) inquiries by field workers, or through the woman's statements to her own physician.

These patients represented a wider range than our male histories, both in education and in health. The mean age is thirty-four years, the range less than that of the men, since a woman is seldom sterilized after she passes the child-bearing age. Hence only two or three of these were over fifty at the time of operation.

Of the 165, we found that ten had had no opportunity to test the result, either because they had not fully recovered from the illness when interviewed or because they had not lived with their husbands since. Excluding these, there are 155 who were able to give firsthand testimony as to the effect of salpingectomy on the sexual life. Seven of them noted a decrease, but several of these had been operated upon recently, after a long siege of ill health, and may yet come back to normal; the others showed various special conditions which explained the decrease but had nothing to do with the operation.

There were ninety-two who reported no change whatever in their sexual life, while fifty-six—more than one-third of the total—stated that their sexual life had been improved by the operation. In most cases this improvement was ascribed either to an improvement in physical

health, or, more frequently, to removal of the possibility of pregnancy, which had caused fear of, or antagonism toward, sexual intercourse.

The testimony of the women is, then, just as weighty as that of the men. A diminution of sexual activity or enjoyment is almost never reported after sterilization, and when it is reported, the cause for it is usually obvious and has nothing to do with the sterilization. And an actual improvement in the sexual life is reported by one man in seven, one woman in three.

The increases, like the decreases, are probably to be explained on other grounds than the mere effects of the operation on the individual. So far as can be judged, the operation has no effect —except to prevent parenthood.

CHAPTER IV

WHAT DOES THE PATIENT THINK ABOUT IT?

Among those questioned in California who have submitted voluntarily to sterilization outside of the state institutions, we have found only two men (mentioned in the preceding chapter) and not one woman dissatisfied. Inevitably, there must often be a sentimental regret over the inability to have any more children, but in almost every case of this sort which we have studied the patient's family was already as large as was wise, and the removal of the possibility of more children was a source of great relief.

This sense of security outweighs the feeling of loss of children. While many of those voluntarily sterilized answer, "I should have desired more children, if my health had permitted," answers like the following are typical:

You ask if I am glad the operation was performed. Indeed, I am, and certainly do not want any more children, as I have a sick husband, and no health myself. Am a firm believer in sterilization where

there is disease or sickness which may affect the children. I think it a wonderful thing in cases of necessity and I am very thankful for what has been done for me in order that I may live to care for the three children I have.

Or this:

After four serious operations (two cesareans and two curettements), almost losing my life during three of them, it is only natural, in spite of my love for children and my desire for a family, that I am glad the operation was performed. I have one little boy and I want to live to raise him. I feel that I could never go through another operation.

COMPULSORY STERILIZATION

Among those who have undergone compulsory sterilization in the state institutions, there is naturally not quite such unanimity of feeling; yet the difference is not great. We were able to get in touch with 173 patients who had been released from hospitals, for mental diseases after sterilization, and who wrote of the results. Six out of seven were either well pleased, or not dissatisfied; the remainder were regretful. We were much surprised that only one out of seven should manifest any particular regret or indignation over the operation, since many of these persons are still more or less disturbed mentally, and it might have been expected that they would find this as

good an excuse as any to give vent to the feelings of persecution which animate many of the victims of such diseases. Those who were displeased, for the most part did not manifest any great regret; some thought it a good thing for others but wrongly applied in their own cases. The following letter is a fair specimen of those expressing dissatisfaction at having been sterilized:

Dear Doctor:

Your letter of June 17 received, in regard to sterilization as conducted in your hospital for some time.

I was operated on in 1918 when I was 21. I was a patient for some 3½ months. Will say this, that it was all a mistake. I have always enjoyed good health, both physically and mentally. I was sick and violent delirious from a very severe fever of some kind and I owe my life to the treatment at the hospital as the doctors hear had little hope, of my life. When I recovered from the fever, I recovered mentally. I was just a living skeleton at the crisis.

I am of the opinion that sterilization does not benefit one mentally or physically. I believe that if anything one is made weaker. However, there is no very great change either way. One may put on a little more fat if inclined to a large waist.

I am now 29 years of age. I am not married, six feet tall, weigh 215 lbs. in good health mentally and physically, look good and am able to do hard manual labor 10 to 12 hours a day on 8 hours' sleep. I am at the present time working in a packing plant handling sweat boxes of dried fruit weighing 125 to 250

lbs. I masturbate about once or twice daily, always have. I keep away from prostitutes, etc., don't use tobacco, liquor, or drugs.

Yes, I believe anyone who is in apparent health and wishes to marry but fears to because of traces of insanity in the family need not fear sterilization. I think it would be a good thing if all criminals were so operated on, as blood will tell. I believe, however, that the operation if performed to any large extent will have a tendency to increase rape crimes, create more triangle divorces, lower the moral standard, etc.

I don't think my case is a very good case to draw conclusions from. I would rather not be sterilized, as I do not think there is the slightest danger of myself being responsible for any weak or feebleminded children, and I shall ever bemoan the fact that I shall never have a son to bear my name, to take my place, and to be a prop in my old age.

My brother Will is at present a patient in your institution. He will, no doubt, spend most of his remaining years there. He does not intend ever to marry and does not wish to be operated on and, as his brother, I hope you will please see to it that he is not.

Among the women, definite satisfaction at the thought of being sterilized was shown by 132, many of them pathetic in their expression of gratitude and their wish that other women who faced the combination of pregnancy and psychosis might have the same protection. Here is a specimen of the letters received:

I am glad to state that my general health since the operation is fine. As a girl, even before my marriage, I was nervous, and had many headaches—and after my last baby was born it seemed I could hardly stand their baby naughtyness—it would make me so nervous. But since the operation they never affect me in that way. I enjoy their companionship and I never have headaches. It is wonderful to be so well.

I do not know whether this is all due just to the operation or not, but I do know that I feel stronger physically and seem to be in perfect health mentally as well.

I certainly do think every person should have the sterilization operation performed before being allowed to return home. It removes all fear of having defective children as well as improving the patient's own health and I cannot say too much in its favor regarding it in my own case.

TESTIMONY OF PAROLE OFFICERS

In order to get a larger sample, we sent circular letters to the probation and parole officers who have dealt with these patients after they left the hospitals. This investigation included the feeble-minded as well as the insane, and statements were received from twenty-two officials, nineteen of whom knew of no instance in which any individual seemed to have suffered mentally from having been sterilized. Two others reported one case each, neither one of which offered any reasonable ground for objection; and a third reported "In

some cases the operation was resented by the individual," but there was no evidence that this resentment had affected his life; nor that it was more rational in its foundation than those already quoted.

Our own investigations and discussions with all sorts of people during nearly three years accord with the foregoing. We found no instance in which the fact of sterilization seemed to have weighed on an individual's mind to the extent of causing any mental injury; and the almost universal reaction was one of satisfaction and relief.

Here in California where the results are beginning to be better understood, the steadily increasing number of cases in which individuals who are or have been mentally ill ask for sterilization is an indication of the public attitude. The attitude of the relatives of the patients toward the operation is also significant. More and more frequently, they come forward with the request that the operation be performed.

RELATIVES GIVE CONSENT

Since the early days of sterilization in California, it has been the custom to get the written consent of the patient's nearest relatives, before sterilizing in the state institutions. This is not required by law, and was done mainly to make

friends for the law and avoid complaint or possible litigation; but the result has been, when the operation was once understood, that the relatives have generally given consent readily and often urged it.

Some patients, of course, have no known or accessible relatives; or the near relatives may be so incompetent mentally that their opinion is valueless. In a case that seems to be serious, the state officials use their authority to sterilize against the wishes of the relatives, if necessary; but not in one case out of ten, perhaps not in one case out of twenty, has the operation been performed without the written approval of the near relatives, if there are any.

Sometimes the nearest relative, not knowing how a mentally diseased patient will react to the operation, tells the superintendent to go ahead and use his own judgment, but declines to sign a formal consent, fearing that this might be held against him by the patient later. And frequently, relatives, and patients too, change their minds on reflection, and not only consent to, but desire, sterilization. Every hospital has probably had cases of this sort; a woman who had a baby was in the hospital with manic depressive insanity. Neither she nor her husband would consent to sterilization, so she was discharged without it.

She gave birth to another child, whereupon both she and her husband came back to the hospital, asking that she be admitted as a voluntary patient for sterilization only, since they now felt that they had made a mistake in opposing the operation previously.

Generally speaking, it is perhaps fair to say that the intelligent insane do not object to, and usually welcome, the operation. The mentally deficient are less likely to appreciate it, because of their intellectual limitations; but their more intelligent relatives and friends do recognize its value, and there are probably more voluntary requests for sterilization of mental defectives than of mentally diseased persons. Even among the mental defectives themselves, there is much less objection than might be expected, owing to the suggestibility of these persons. If they are told that it is not to their own interest to have children, and that the operation will not affect the sexual life in any way, they are likely to believe it.

People sometimes assume that any one to whom sterilization is suggested resents the suggestion as much as they themselves would do. One of the most significant of all the facts brought out in the study of California sterilization is that this supposition is largely incorrect, and is becoming more and more so all the time. A large part

of the public is ready to accept sterilization for itself as well as for others—so much so that a purely permissive and voluntary law would cover most operations. It is desirable to include a compulsory provision in the law, so that the state may protect itself in emergencies; but in practice it is found that this compulsory provision rarely needs to be invoked.

CHAPTER V

EFFECT ON THE PATIENT'S BEHAVIOR

The preceding chapter discussed the effects of sterilization on the individual's feelings. What is the effect on his actions—what change is produced in his relations with others?

Fear has often been expressed that the mentally deficient persons freed from possibility of parenthood would be encouraged to lead a life of sexual delinquency. Such fear argues scant knowledge of human nature. The fact that three-fourths of the sterilized feeble-minded girls of our study had been sexually delinquent prior to commitment is sufficient evidence that they are not deterred from anti-social conduct by fear of consequences. As a fact, this is precisely the class which has not sufficient foresight or self-control to be worried by what may happen later.

Among the mentally deficient in state institutions, it may be stated at once and definitely that the males are not sex offenders. The feeble-

minded young man is undersexed; he lacks the aggressiveness as well as the attractiveness necessary to play such a rôle; and he is quite unable to compete with males of higher intellectual levels in this sphere. There has not been a single instance discoverable by us in which a sterilized feeble-minded male has been a sex delinquent. None of the sterilized males had been married prior to commitment, and only three have married since.

The feeble-minded female of the type committed to institutions, on the other hand, is characteristically a sex delinquent. She is oversexed, feebly inhibited, lacks other interests, and is not merely a ready prey to unscrupulous males, but too often herself an aggressor in this field.

Of the sterilized feeble-minded females, nine in twelve had been sexually delinquent prior to commitment to the institution, as was mentioned above. When placed on parole after sterilization, however, only one in twelve of these same girls was sexually delinquent. Evidently, under the conditions of parole in California, where the patient is either kept under the continued supervision of a state official, or else is entrusted to some other responsible person, delinquency is curbed so effectively that the interests of the commonwealth are well protected.

DELINQUENCY DECREASED

Of course, this decrease in delinquency was not due to sterilization. Suppose, for the sake of argument, that it be said to be in spite of sterilization. It was due to careful placing and effective supervision on parole.

But it was the fact of sterilization, in many cases, that made it possible for the girl to be given this parole, with its opportunity to live a normal life in the community, to make herself self-supporting, to relieve the state of the expense of her maintenance, and to leave room in the institution for a more helpless case that required lifelong custodial care.

Parole and social workers in touch with the situation in California generally agree that this system is working well. Of twenty-two who reported, twenty had never heard of an instance in which the fact of sterilization seemed to have acted as an incentive to promiscuity, or to have been regarded by a sexually delinquent woman as an asset. One man reported a single case; another spoke of "two or three," as to which he said that he had no definite knowledge. We ourselves learned of two others. Even assuming that all these were different cases and actual delinquents, there seem to be not more than half a dozen cases, in nearly twenty years, in which the

result that is so widely feared has actually occurred. And, in these cases, the girls' deviations from the path of rectitude were noted quickly and they were sent back to the institution without delay.

The marriages of 125 feeble-minded sterilized girls were studied, the criterion of success being that they should be (1) monogamous, (2) law-abiding, (3) self-supporting or supported from some legitimate source, and (4) reasonably happy. If applied to the marriages of unsterilized persons, that would be found to be a fairly severe standard. By it, two-thirds of those who could be located were judged to be successful in marriage. Twenty-six of the group could not be found for an up-to-date report; all had been doing well when last heard of, but they are excluded from our summary. On the average, these girls had married men slightly higher in economic status than their own families. Of the one-third who failed in marriage (not always their exclusive fault, of course) part disappeared; the others were returned to the Sonoma State Home as soon as it became evident that the marriage was not a success.

So much for the mentally defective. Among the mentally diseased we did not find a single case where sterilization seemed to have any bear-

ing on subsequent delinquency. It would not be at all surprising if a few such cases occur; but if any have yet occurred in California they have not come to public notice. Many of the mentally disturbed (here again the females rather more frequently than the males) show an aggressive promiscuous trend as part of their disturbance, but this is likely to be modified by residence in a hospital, since the patient is not released until the disturbance has cleared up. Proper supervision on parole, afterward, helps to keep the patient out of difficulties.

Sterilization, then, has not affected conduct in such a way as to prejudice the peace and dignity of the state of California. Does it alter the individual's relations to those around him in other ways—does it break up homes, cause the patients to be looked down upon, or shunned?

FAMILIES KEPT TOGETHER

On the contrary, the unanimous testimony is that it keeps families together, sometimes when nothing else would do so; that it enables the members of the family, in many cases, to retain their self-respect because it enables them to meet their problems. Case after case might be cited in illustration. Here is a woman who suffers a mental breakdown every time she becomes pregnant.

Fear never leaves her; she keeps her husband at arm's length; the household becomes one of antagonism; the strain is about to break and shatter the home. She is sterilized and her fear is removed; one might almost say that married life begins all over again for this woman and her husband.

Here is a man below the border line of normal intellect, whose family is being increased at the rate of a child every year or two, while his jobs remain as casual as ever. Any social worker can predict the future; he gets discouraged and simply walks out, abandoning his family, which is thenceforth supported by the county charities which, for convenience and economy, separate the children from the mother so that she can work to support herself, while the children are placed around wherever homes can be found for them. That home is gone. But if the husband or wife is sterilized before this happens, the home will be maintained.

The suffering of a parent who has had a mental breakdown, who has seen some of his relatives die in state hospitals, and who fears the same fate for his children, may be even more acute, and may lead to tragedies of various kinds, of which suicide is the least. There is in one of the state hospitals the first woman sterilized in that

institution, in 1910. Her mother and sister were both insane, and she had had a previous confinement in an asylum. She had five children. A second breakdown came to her, and she began to brood over the fate of her children. She decided, illogically enough, that the children born before her first breakdown would be all right, but that the later three were doomed to insanity; so one day she took them in the bathroom one at a time and drowned them in the tub to spare them future suffering. In her case, sterilization came ten years too late to be most useful. Incidentally, she is one of the strongest advocates of sterilization and a constant and effective propagandist for it among new patients at that hospital.

A single instance to the opposite effect came to our notice, and is unusual enough to be related. One man wrote that in his case his sterilization had led to the break-up of his home—his wife divorced him. He went on to explain that she had long been unfaithful to him, but did not fear the consequences, as she had her husband for an alibi. But after he was sterilized, pregnancy would have been awkward for her to explain, and she decided it was wiser to change her base of operation.

TESTIMONY OF PAROLE OFFICERS

The testimony of the parole and probation officers may be taken again here.

Eighteen had never known of a case where sterilization seemed to have been resented by the individual's relatives to the extent of causing domestic infelicity or broken homes. One said she had never known of a home being disturbed, but that relatives who had any grievance against a state institution sometimes used sterilization as a ground for finding fault. Another told of one instance in which relatives resented operation, not because they did not want it done, but because they thought there was a stigma attached to having it done at a state hospital.

Two others referred to the same case, of two girls who had married men above them in station, without letting their husbands know of the fact of sterilization. These were marriages made clandestinely, without the approval of the superintendent of the state home for the feeble-minded, who makes it a rule that either he or one of his representatives must talk the situation over with the prospective bride and groom together, so that there can be no possibility of misunderstanding about this matter. In the two cases mentioned, the girls were not able to maintain a standard of conduct to which their husbands were accustomed,

and domestic inharmony resulted; the husband in each case seized on the concealed fact of sterilization, among other things, as a ground for complaint.

We have no systematic evidence as to the attitude of the public toward voluntary sterilization. Our general impression is that it is favorable. At any rate, in discussing the subject before men's and women's clubs and organizations of many different kinds in California during the last three years, we have found an almost unanimous assent to the principle; and during three years of close contact with the situation, we have never heard of a case where voluntary sterilization produced any other than a favorable change in a domestic situation, except as above noted.

CHAPTER VI

STERILIZATION WILL NOT PREVENT THE BIRTH OF GENIUS

Would not the parents of many great men of history have been sterilized, if such a policy had been in effect in the past? Would not the birth of a great deal of genius have been prevented, and will not this policy prevent the birth of genius in the future?

The answer to these questions is No.

That many great men have been themselves insane or the offspring of insane parents, is a superstition that has been widely disseminated. An actual count shows that from two to four per cent of the eminent men of history have been at some time in life mentally diseased to a degree that might be called insanity. As four per cent of the population of the whole United States will be similarly disabled at some time during life, it appears that the great man is no more likely to fall a victim to mental disease than is any man picked out at random in the street.

Moreover, the proportion of geniuses in history, who have been the victims of, or who have come from families marked by, mental disease has been swollen by the method of picking out "geniuses." Many of those so named are men who have done the world far more harm than good. When eminence comes to be limited in the public mind to persons who have really done something toward the progressive evolution of mankind, the association of it with mental disease will be found to be even farther removed.

It would be difficult to pick out a parent in the whole realm of history whose sterilization, based on the kind of reasons that are held to justify sterilization in California, would have cut off progeny that the world could not well have spared.

To take a contemporary group, the brightest children in the California schools have been studied intensively, and 502 pairs of parents of these children were studied in the same way. Of these only four parents—two fathers and two mothers—had ever been insane. The number of families which showed any history of insanity at all (and the cases that existed were mostly remote) was only one-fourth as great in proportion as the number of families of sterilized patients from the mental hospitals who showed a family

history of insanity; and in the latter cases the affected relatives were often very close, as compared with the more remote cases among the relatives of the superior children.

Moreover, these superior families doubtless traced their history back much more fully and accurately than did the families which sent their defective members to the state to be cared for. If the latter histories were known equally well, the percentage of defect and disease in their ancestries would undoubtedly be higher.

A study of the economic standing of the sterilized California insane males is also illuminating. More than half of them were from the ranks of unskilled or semi-skilled labor. This is not the class that produces brilliant children—only one of the fathers of the 1,000 bright children studied in California was listed as an unskilled laborer, and he was an exceptional case, a farmer who had moved to Berkeley and taken any kind of work he could get in order that his children might attend the state university.

When the occupations of the men were ranged in order, roughly according to the amount of intelligence needed to fill them, it was found that half of the sterilized males fell in grades that have produced virtually no superior children; while half of the fathers of superior children were in

grades so high as scarcely to be represented among the sterilizations at all.

In short, sterilization of the mentally diseased, as it is now being practiced in California, will prevent the birth of very few superior children, while it will certainly prevent the birth of many children who would be eugenically inferior.

The case is even clearer among the mentally defective. A genius may occasionally be the offspring of an insane parent, but where is the genius whose parents were feeble-minded?

Here, again, the professional class, which furnishes the great bulk of intellectually superior children, furnishes much less than its proportional quota of mental defectives. The latter come predominantly from the class of skilled laborers, not because these are inferior to the average of the population, but because they are the largest group in the population, in California at least.

Even if some of these defectives may transmit to some of their offspring good qualities which they themselves do not show, yet is a feeble-minded parent the one to bring up superior children successfully? Would the occasional normal child justify the burden to parents, children, and the race that is involved in continued childbearing in these defective families? Does America need children that badly?

CHAPTER VII

VOLUNTARY STERILIZATION

With a gradual spread of the understanding of sterilization in California, the number of operations performed in private practice, without any reference to the eugenic law, has increased steadily. Probably as many women have been sterilized privately as in the state institutions during the last ten years.

Sterilizations of men are less frequent, partly because it is not well understood by the public generally that the operation does not affect the sexual function; partly because there is rarely occasion to sterilize a man for protection of his own health whereas most of the women have been sterilized for that reason. Still we have found one California doctor who has sterilized nearly 150 married men, merely to prevent procreation. And the practice is definitely extending.

The number of sterilizations among women has been greatly increased by a growing tendency of surgeons to couple the operation with abortion.

Some hospitals have adopted the policy that if a woman's condition is so serious that she cannot carry a pregnancy to full term, it is so serious that she should not become pregnant again; and if she must have an abortion performed she will have to submit to sterilization at the same time in order that she may not come back again every year or two for the rest of her reproductive life with the same story.

Such a policy naturally leads to an increase in the number of sterilizations performed at that hospital. Probably not less than 500 women have been sterilized at one public hospital during the last ten years—not all in connection with abortions, of course, the majority being in cases where the woman's life was threatened by further pregnancies.

AT STATE HOSPITALS

Most of the state hospitals have also received a few persons as voluntary patients, merely for sterilization, sending them home as soon as they recovered from the operation. These were all persons who were mentally below par, or who came of unsound ancestry. The greatest number of such persons has been sent to the Sonoma State Home, where at least one hundred patients have been received "for sterilization only." Nearly all

of these, however, were committed by the courts in the regular way, and it was left to the discretion of the medical superintendent whether they should be released immediately after sterilization.

A study of this group showed that they did not differ in age, average intelligence, previous behavior, or family background from other patients committed to the home. When paroled, three-fourths of them make good, which is just the same as the record made by girls who were sent in the usual way and not "for sterilization only." Only a few of the girls have actually been discharged, the superintendent preferring to keep them on parole so that the state could maintain proper supervision over them and give them whatever assistance they might need to make their own way in the community.

The experience of this group shows that some social workers are too optimistic as to a girl's ability to adjust herself to community life, and are sending, for sterilization only, girls who should be sent for indefinite custody. Fortunately, the medical superintendent is the sole judge of the proprieties, once a girl has been committed legally, and he can refuse to release her if her record while in the institution does not warrant it. He also can, and usually does, keep her on parole instead of discharging her, so that she can be returned

at any time that she fails to make good. Of the sixty-six girls sent only for sterilization, who were paroled and whose histories we followed up carefully, only seven have been discharged. Two of these were dropped from the books because transferred to other state hospitals; four of the others were married, and the fifth, who is working as a nurse girl in a private home, is under the supervision of her county agent.

The state is thus able to, and does, protect itself against overzealous workers. But the conclusion is inescapable that sterilization is a matter of public concern; that it must be, in general, considered an integral part of a state system of supervision of the incompetent; whence it follows that private sterilizations, performed outside of the state institutions designated under the law, should also be subjected to some sort of state supervision.

WOMEN WITH TOO MANY CHILDREN

Some of the women sent for sterilization only by social workers seem to be sent mainly because they have already borne as many children as they can take care of, if not more. Sterilization then prevents continued childbearing from breaking up a home and throwing additional burdens on the county charities. Delinquency is not a question in these cases.

A striking illustration (though accompanied by mental disease) is furnished by a woman with seven living children, who was committed to one of the state hospitals. She was born in Turkey, has two insane sisters, and an insane brother who committed suicide. When sterilization was suggested, she seemed dismayed, and said she would have to consult her husband, a sickly tailor. Following his next visit, she reported to her physician that she had talked the matter over with her husband and they had agreed that she ought not to be sterilized at the present time; later perhaps, but not now. "You see," she explained, "we are getting half-orphan aid from the state for each of our seven children. We have figured out that when we have two more children, the amount we receive each month will be just enough for us to live on, and then my husband wont have to work any more. So we wouldn't want for me to be sterilized just yet."

Unusual as this case may be, it represents the extreme of a situation that exists somewhat more frequently. Such cases, whether the parents are mentally diseased or not, seem to come within a reasonable application of the principles of eugenic sterilization. On the other hand, it seems hardly necessary that such patients be sent to a state hospital, perhaps five hundred miles from their own

homes, for sterilization; it might be done, under suitable safeguards, in their own community.

HELPLESS DEFECTIVES

Another group consists of girls of the lowest levels of intelligence, who will never be anything except custodial cases, but whose parents are well able to assume the burden of their care, and prefer to keep them at home. To prevent pregnancy in case some man should take advantage of the girl at an unguarded moment, they desire to have her sterilized. A number of striking cases of this sort have been sent to Sonoma, including two idiots. It is worth mentioning, in passing, that the mother of the lower of these (I. Q. 16) noted on the application blank that the patient is "fond of men." That the danger to these girls of low intelligence is real will probably be admitted by most informed persons, and is illustrated by the history of a fifteen-year-old girl (with the mind of a three-year-old) who was in addition so deformed physically that her parents believed her quite safe in her own home, when they occasionally went out. On one such occasion she was raped by a delivery man, and gave birth to a child, whereupon she was sent to Sonoma to be sterilized.

Some have suggested that these individuals of

lower levels of intelligence ought all to be institutionalized. Whatever the merits of this proposal, the fact is that there are not enough institutions in the United States at present to receive them all; and if the parents of such an individual can keep her, the available institutional space can be used for some one who is delinquent as well as feeble-minded, whose custody will be more beneficial to the state and to the human race.

TROUBLESOME DELINQUENTS

A third group consists of predominantly young women, unmarried though often illegitimate mothers, sexually delinquent and often mentally abnormal. The records seem to show that this type of girl is sent for sterilization because it is felt that she will otherwise be likely to produce undesirable, probably illegitimate, children, and that if she is sterilized the state will be protected from this undesirable addition to its citizenship, as well as from the burdens and depression that would fall on family and community.

While the assumption is well based, the histories show plainly enough that reproduction is by no means the only anti-social contribution such a girl can make; that sterilization will not change her mental and emotional make-up, and that the larger interests of society can be protected only

if she is placed under careful supervision, if not in institutional custody. Sending such girls for sterilization only, to a state hospital, argues a misconception of the proper function of sterilization in any scheme of social betterment. So long as they are sent to state hospitals, the superintendents of these institutions are able to use their authority to protect the state. But if sterilization outside of the state hospitals spreads—as it is in fact doing—and if this same type of girl is sterilized privately without any such possibility of supervision later, the results are likely to be unfavorable.

The illegitimate mother may need segregation; certainly she needs supervision. She may or may not need sterilization; that is a question to be determined after the facts in that particular case have been heard. For the state to admit that sterilization is the only remedy it can offer in such cases would be disastrous. One of the greatest dangers in the use of sterilization is that overzealous persons who have not thought through the subject will look on it as a cure-all, and apply it to all sorts of ends for which it is not adapted. It is only one of many measures that the state can and must use to protect itself from racial deterioration. Ordinarily it is merely an adjunct to supervision of the defective or diseased. Its

object is to protect the public, but it must protect all of the interests of the public, not merely one of them.

IN PRIVATE PRACTICE

The 420 women sterilized in private practice, whose records were collected by a committee of the Los Angeles Obstetrical Society, in order to provide a companion study for the women sterilized in the state hospitals, represent a wide range in every way. Only twenty-eight of them were unmarried, and some of these have married since. Virtually all of them were of childbearing age, only twenty-nine being forty-five or above, and the greatest number being in the age group twenty-five to twenty-nine.

The reasons that led to the operation are extremely varied. The largest group was sterilized because there was what might be called mechanical hindrance to childbearing—for instance, a narrow pelvis which prevented the normal delivery of the baby and required its removal by surgical means (cesarean operation). If a woman has given birth to a child, or two, or three, in this way, it frequently seems advisable to sterilize her in order that she may not incur the risk again, but may live to take care of the children she has. In this group we have also put cases

where the presence of fibroids in the uterus made an operation for removal necessary. Since the uterus is likely to be left impaired after such an operation, the woman is sterilized in order that a child may not be conceived who cannot possibly be born alive.

The second group in size is that in which sterilization was performed because another pregnancy would endanger the patient's life. Most of these women are suffering either from tuberculosis, a bad heart, or defective kidneys, and, in the surgeon's opinion, the condition of each was so serious that pregnancy might have resulted fatally for the mother—in which case the baby, too, would have been sacrificed.

A third and much smaller group was sterilized incidentally, so to speak; the Fallopian tubes had to be removed because they were infected (usually with gonorrhea, sometimes with tuberculosis or other disease), and sterilization naturally resulted.

Two other groups are of about the same size: one in which the operation was performed for economic reasons, the other eugenic. In the first named, the parents simply had as many children as they wanted, and sterilization was performed in most cases when some other operation, that required opening the abdomen, made it convenient to do so. In the last named, the operation

was frankly eugenic in purpose, it being the judgment of the relatives and the surgeon, as well as of the woman herself, that the children who might be born would be diseased or defective.

Finally, a few were sterilized for what might be called mental protection—because it appeared that another pregnancy, or perhaps any pregnancy at all, would cause a mental breakdown. Recapitulating these groups:

Mechanical impediment	160
Physical protection	116
Infection	43
Economic necessity	40
Eugenic reasons	37
Mental protection	19
Not stated	5
	420

It is apparent that nine out of ten of these private operations are done for the benefit of the individual, not of posterity. Probably the eugenic aspect is really more important, but is not always expressed, since it is not universally regarded as a sole ground for sterilization. In most instances, there is no single reason for the operation, but a number of reasons that, taken together, made the sterilization seem either desirable or necessary.

LOW FECUNDITY

The number of living children of 372 of the women was stated. It is generally recognized that a married couple must have more than two children to perpetuate itself, because some of the children will die unmarried, others will marry but be childless. It is found that each couple which has any children at all must bring at least three to maturity, in order to keep a group from declining in numbers; and possibly even three will not suffice, with the present birth and death rates.

About one-half of the sterilized women had three or more children. Forty-nine were childless. As a whole, the group does not appear to be a fecund one. Probably the physical and mental disabilities that eventually led to sterilization have tended to keep down the fecundity. Moreover, a woman who is not very fond of children may be the most likely to permit or insist on sterilization.

Considering the great importance which sterilization has for the future of the race, it ought to be studied much more widely. The present small sample of private sterilizations will not permit of general conclusions. So far as it goes, it indicates that most private sterilizations are for personal reasons, and that the number of women who are

sterilized in private practice, either for social or for eugenic reasons, is only a very small part of the whole. But, as we pointed out above, many operations made ostensibly on personal grounds also have social and eugenic reasons in the background.

If non-institutional sterilizations in general are at all represented by this group, it does not appear that any great change in the hereditary make-up of the race will result. Some undesirable children and perhaps a larger number of desirable children will be cut off; but the women are of low fecundity anyway and half of them have already had enough children to perpetuate themselves, before sterilization.

MEN STERILIZED PRIVATELY

Our group of sixty-five normal sterilized men is too small and too highly selected to permit us to draw any broad conclusions. It is made up largely of intelligent, professional men and, in marked contrast to the situation among the women, most of the men had been sterilized deliberately as a method of preventing conception—simply because they had all the children they wanted.

The reasons given by these men for undergoing the operation are:

Eugenic	5
Economic	3
To protect wife's health	14
Rejuvenation	6
Contraception	36
Not stated	1
	65

More than half frankly admitted that the operation was merely a substitute for birth-control methods which would have been less effective and more unpleasant. Others, including the three who ascribed economic reasons for not having more children, might well be added to this group. A clergyman, aged fifty-three, had a family by a former wife; he married a second time and, not desiring a second family, had himself sterilized just before the ceremony, apparently with the approval of the bride-to-be. Another man, about to marry at the age of twenty, had himself sterilized because his prospective bride had been informed that her pelvis was too small to permit her to bear children safely. With a few exceptions, however, all the men had been married for some time before the operation.

Even some of the men who alleged eugenic reasons must be suspected of having been actuated more by motives of convenience and inclination. There may be some doubt in the case of

the man who gave as a reason for sterilization that some of his relatives had harelip; but few will take seriously the plea of the young man who said he was sterilized "on account of asthma in his wife's family."

In short, the returns from these men point strongly to the fact that they have sought sterilization in the same spirit that the more intelligent and prosperous people throughout the civilized world have limited their families during the past generation or two. There is no evidence that society has been harmed, but, in the majority of instances, there is also no particular evidence that society has benefited from the operation.

But the number of cases is too small, as stated before, to permit the drawing of any general conclusions.

CHAPTER VIII

THE STERILIZATION OF CRIMINALS

CALIFORNIA'S sterilization law now contains provisions for sterilizing the following classes of criminals:

1. Any person who "has been committed to a state prison in this or some other state or country at least two times for rape, seduction, or at least three times for any other crime or crimes, and shall have given evidence while an inmate of a state prison in this state that he is a moral or sexual degenerate or pervert."

2. Any person sentenced to a state prison for life, whether a recidivist or not, who "exhibits continued evidence of moral and sexual depravity."

3. Any person "adjudged guilty of carnal abuse of a female person under the age of ten years."

In the case last mentioned, "the court may, in addition to such other punishment or confinement as may be imposed, direct" that the operation be performed. In the first two cases, the

operation is to be recommended by the prison physician, and approved by the director of the State Department of Institutions and the director of the State Department of Public Health; sterilization is compulsory if, in the opinion of these three, or any two of them, it will be beneficial to the prisoner.

The law governing class No. 3 above, adopted in 1923, has never been used, so far as we can learn. Examination of the provisions concerning classes Nos. 1 and 2 above mentioned indicates that, in the minds of the legislators, the law was intended primarily to be therapeutic—it is put forward as a method of treatment for sexual or moral perversion, degeneracy, or depravity. There is some indication in the application to recidivists that it was also expected to be eugenic—a protection to the subject, to the state, and to future generations. Possibly there was also the idea in the minds of those who passed the law that it was a suitable punishment for certain crimes, as well.

We shall point out in Part II that sterilization, as the term is used in this volume (more specifically, as referring to the male, vasectomy) is not, and when properly administered cannot be considered, a punishment. It is a protection to the subject, to his family, to the state, and to future generations. To make a punishment out of steri-

lization, in any sense, one must castrate the patient, instead of merely sterilizing him.

It is unfortunate that this distinction has not been understood better from the first, by the legislators, the public, and the courts. Future legislation on this subject should draw a definite line between eugenic sterilization (vasectomy) and an operation (castration) as a punishment for crime. If any state wants to use both of these operations, they should be embodied in separate bills. Based on the decisions of the American courts, and particularly on the recent decision of the United States Supreme Court in Buck vs. Bell, such a separation of the two issues will insure the constitutionality of the provision for eugenic sterilization at least.

There is a wide variety of opinions underlying the principle of the sterilization of criminals in any manner, either as punishment or for eugenical reasons; and much study will be necessary to settle these differences of opinion. The very limited practice of sterilization of criminals in California under the sections above enumerated (seven operations in all) furnishes no information to settle these differences of opinion. Our study of the subject must therefore be limited, for the present at least, to the broader field of eugenic sterilization of all hereditary defectives, wherever they may be found.

CHAPTER IX

THE OPERATION

Since the beginning of history, a violent substitute for sterilization has been practiced by the radical method of castration. The introduction of modern methods of sterilization which do not remove any gland or organ, do not alter any feeling, and do not bring on a "change of life," or change in appearance has been the greatest step forward.

For the female, the development of such an operation arose from a need felt for some method of sterilizing a woman after a baby had been removed from her uterus by cesarean section. In such cases the uterus may be weakened by the scar, and it is sometimes thought desirable to prevent further pregnancy. In 1823, an Englishman suggested that the tubes which conduct the egg cell from the ovary to the uterus might be cut at the time of a cesarean operation, thus preventing future pregnancy. So far as can be learned he never performed this operation himself, but merely offered it as a possibility.

In 1880 an American, during a cesarean operation, tied the tubes to prevent possibility of future conception; in 1891 a Frenchman combined these two operations by both tying and cutting the tubes, thereby introducing the method of sterilization which is now standard. In 1897 a German surgeon took up the operation as a means not merely of preventing further cesarean sections, but of sterilizing a woman who for any reason ought not to bear more children. He published the details of an operation he had performed on a woman who had given birth to seven children, some of whom were feeble-minded, the others abnormal in other ways. The report attracted widespread attention. He operated through the vagina; but in the same year, and in the same publication only a few months later than the German, a Swiss surgeon made similar recommendations, but urged the advantage of operating by opening the abdomen. This is the practice almost universally followed; and modern sterilization of the female may be said to date from the year 1897. The method has been used increasingly ever since, until it is now known everywhere and practiced much more frequently than the public suspects.

Sterilization by opening the abdomen is practically equivalent to an easy operation for chronic

appendicitis, in relative simplicity and speed. It is a major operation, involving two weeks or more in the hospital, but the risk to life is negligible; one California surgeon has performed more than 500 without a fatality or a single serious complication. In more than 2,500 such operations in the California state hospitals, there have been three deaths. One of these was from the anesthetic; the other two as a result of infection. In at least one of these cases, the patient, a feeble-minded girl, tore off the dressings and may have infected herself. Dealing with patients of this class offers some real problems. One woman escaped from bed, got outdoors, and climbed a tree on the day after the operation. Fortunately, there was no serious result from this escapade.

A skillful surgeon can carry out the operation by an incision not more than two inches long in the lower abdomen; and if this incision is made crosswise in the region covered by pubic hair or in the normal crease above it, it will be invisible after it has healed.

FAILURES

The operation is not 100% successful, for an occasional pregnancy has followed, due to the reopening of the channel which was supposed to be closed.

This may occur in a variety of ways, for Nature —to speak figuratively—makes every effort to keep open a passage of such importance. Sometimes the stitches cut through and leave an opening, a tiny fistula to give passage to an egg. Or the walls fail to adhere to close the passage. In the cases reported from all countries during the last half century, six or seven per cent have been followed by pregnancy, usually within six months or a year. In California there have been only four known pregnancies in 2,500 cases where the tubes were cut and tied. However, some of these patients doubtless had no occasion to put the success of the operation to a test: either they were unmarried or not living with their husbands; or they may have been barren from some other reason. The failures are still greater (at least 18%) if the tubes are merely tied without being cut, so this operation has long since been given up by experienced surgeons.

It is a simple matter to test the tubes and find whether or not the operation is successful. The surgeon waits three months or more until the scar is strong. He then employs a standard method (Rubin) of attempting to pass gas by an apparatus in constant use for tests of sterility, or he can use the very simple and inexpensive device of R. L. Dickinson for the same purpose. He

introduces into the neck of the uterus a tube at the other end of which is a bulb and a gauge such as is used by every doctor for testing blood pressure. A slow squeeze of the bulb passes air into the uterus and registers the pressure on the gauge. If the hand on the dial suddenly drops back to zero after reaching 60 or 70, it is evident that the air has passed through the Fallopian tubes and into the abdominal cavity. If air can pass through in one direction, the egg may pass through in the opposite direction. On the other hand, if the uterus holds air at a pressure equivalent to 160 mm. of a mercury column, it is clear enough that it is sealed and conception cannot take place. Test of the sufficiency of the operation, by this method of insufflation, should be a routine follow-up of every surgical sterilization.

Theoretically, at least, the operation can be undone by various surgical procedures, and a few cases are on record where it has been undone in the male. But in a series of operations done abroad with the thought of undoing them later, only two or three of the women ever expressed any desire that fertility be restored. Compulsory sterilization should be applied only in cases so clear that there would never be any justification for reversing the operation.

X-RAYS AND RADIUM

Between 1905 and 1910 the lately discovered X-ray began to be tried as an agent of sterilization; shortly afterward radium was used for the same purpose. The objections to radiation are (1) that the dosage needed is doubtful, depending on the size and age of the patient, and the operator may find he has produced only a temporary, not a permanent sterilization; (2) the treatment does not take effect until a short but unknown time afterward—in the meantime a pregnancy may occur; (3) should there be an unsuspected pregnancy at the time of radiation, an abnormal child will be born in a majority of the cases; (4) most of the radiated patients have been followed up only a few years, and it cannot yet be said with absolute confidence that no other harm may be done by the treatment, which may make itself evident later; (5) radiation with permanent cessation of menstruation is really a castration operation, since it destroys the hormone-producing part of the ovary and brings on the change of life. This means the physical disturbances that often accompany the menopause, with shrinkage of the breasts and sometimes of the reproductive organs, together with diminution of sexual desire in many cases. The X-ray, then, does not recommend itself as a general method of steriliza-

tion, except perhaps in a woman who is already near the menopause, or in a woman for whom sterilization is absolutely essential and whose physical condition is too bad to permit her to undergo a surgical operation. Radium has the additional disadvantage of requiring a general anesthetic and sometimes producing leukorrhea.

X-ray has often been urged as a desirable means of temporary, if not permanent, sterilization. The woman who is handicapped with tuberculosis, for instance, might not desire a child now, but might want one later on if she recovers. In this case it is urged that a light dose of X-ray would produce sterility for six months or a year, leaving her still fertile and able to become pregnant when desired.

There is no good evidence that such a course will result in the production of defective offspring if used on non-pregnant women; but there is good evidence to suggest that it may provoke mutations in the germ plasm which will result in defective offspring not in the next generation, but in some future one. At present the use of X-ray for temporary sterilization would probably be held, by most students of heredity, to be unjustified for this reason.

There is a possibility that a simpler method of sterilization can be worked out, by passing a

probe with caustic, or a tiny cautery tip, into the uterus through the vagina, and sealing the openings of the tubes. There is a probability that some method of sterilization by the injection of a hormone may eventually be worked out. This could now be done by injection of an extract from the placenta; but such treatment produces all the discomforts of pregnancy without any of the compensations of that condition. These are all possibilities of the future; meanwhile surgical sterilization offers a relatively safe, simple, and dependable method.

VASECTOMY

Sterilization of the male is also the successor of castration. In 1894 a Swede introduced the practice of cutting and tying the vas deferens, the slender tube that carries the spermatozoa from the testicle to the penis, as a method of treatment in case of diseases of the prostate and the operation quickly became popular. The first man to adopt this simple operation for eugenic sterilization was apparently Harry Sharp of the Indiana reformatory (see Chapter II); later it was taken up by others, perhaps independently in some cases. Since then, it has never had any rival, its simplicity making it very nearly ideal. Modern sterilization of the male may be said to date from

1899, when Dr. Sharp performed his first operation.

In the early days of X-ray it began to be noticed that men who were using it became sterile, although their sexual life was not affected. Later the introduction of proper protection for operators became general, but not until after it had become well established that radiation produces temporary or permanent sterility. It has therefore sometimes been used and oftener been urged for eugenic sterilization; but as it is open to many of the same objections as in the case of the female, and as vasectomy offers all the advantages desired, X-ray has not come into general use for this purpose.

Theoretically vasectomy is also reversible, and skilled surgeons have had about 25% success in reëstablishing the opening of the tube and getting pregnancy of the wife. Here again, however, only those men should be selected for sterilization whose parenthood is so undesirable that there can never be any question of restoring the function.

Vasectomy is a simple operation that can be performed in the surgeon's office—it is no more serious than pulling a tooth. The vas is rolled up under the skin of the scrotum, and a slight incision, not more than half an inch long, is made

in this. The vas is then picked out with forceps, a piece about a quarter of an inch long cut out of it, and one or both of the severed ends tied. The tube is dropped back in the scrotum, the incision closed with a single stitch, the operation repeated on the other vas, and the patient can go about his work. Properly done, the procedure is virtually bloodless, and after the slight incision heals it is invisible. In the state hospitals, it is customary to keep the patient in bed for a day or two after the operation in order to avoid complications, but in vasectomies performed in private practice, the patient usually walks away to his work and does not lose any time. The whole operation can be performed in five or at most ten minutes.

Vasectomy is not infallible. In 3,500 operations in California there have been three cases where pregnancy of the wife followed. Of course, it is always possible in such cases to suspect adultery; but in these cases that was probably not responsible. One of the tubes probably reunited. This has been found, in experiments with lower animals, to occur rather frequently. In practice, accidents should not happen because semen can be tested easily by examination under the microscope, to determine whether there are or are not spermatozoa in it. Vasectomy leaves the same

apparent bulk of fluid to be produced at each emission, as the prostate gland and seminal vesicles continue to perform their function. It is only the minute, but vital, part from the testicles that is cut off.

PART II

THE CONCLUSIONS

CHAPTER X

STERILIZATION FOR PERSONAL REASONS

STERILIZATION for purely personal reasons is naturally voluntary, not compulsory.

Clinical sterilization, for the protection of health, needs no discussion here. It is the domain of the medical profession, and the present laws are adequate to meet its requirements.

But if sterilization is asked merely for the couple's convenience and financial situation, the state cannot assent. The state can offer assistance in many forms that would meet the problem better than sterilization. From the state's point of view, there is no justification for sterilization in a family that can produce eugenically desirable children, merely because the family feel that additional children would prevent them from having some luxuries, social enjoyment, or even some necessities that they might otherwise have. Conditions may change, making it possible for the couple to have additional children. Or some of the living children may die and the parents may desire to have others.

A vivid side light is thrown on the situation by the married couples who limited themselves to one child, and who lost this child during the World War. The facts were often mentioned in death announcements, and an investigator questioned one hundred such couples in Germany as to why, on the birth of a son as first-born, they had cut short their reproduction. The answers naturally revealed an agony and despair that plumb the depths of human misery; but it is particularly interesting to note that in a large proportion of cases the hatred of the parents was directed against the medical profession which, they asserted, was all too ready to assist in limiting families unnecessarily, even by methods which prevented any possible pregnancy in the future. Without accepting the accuracy of this indictment, or assenting to the tendency of the parents to blame the medical profession instead of themselves, one can yet see a natural result of the application of the idea, so fervently sustained by certain Birth Controllers, that it is for the parents themselves to decide how many children they want and that it is an unwarrantable impertinence on the part of any one else to make any suggestions to them on this point.

The state cannot force people to have children; but it is certainly no part of its function to steri-

lize in such cases, merely because it is too indifferent or negligent to provide help in other forms.

THE SURGEON'S POSITION

From the medical point of view, the situation seems equally clear. It is the surgeon's duty to protect the health or life of his patients. To sterilize a healthy young married couple simply because the birth of children would not suit their convenience is no part of his function; it is not the act of a physician for a patient but merely the act of a man doing a service of a commercial nature to people who should find some other means to accomplish their desires.

If this position is well founded, then it is not desirable that clinical or other indications for sterilization should be put forward as a subterfuge to cover operations that are really done for reasons of private convenience; it is not even desirable that operations be done ostensibly for clinical reasons, as now often happens, when the real purpose is eugenic. It is inevitable that the state shall oversee sterilization operations, and it is to its interest to promote clear thinking and to call for unequivocal statements on the part of those directly interested.

Whether a healthy man should be sterilized to protect an unhealthy wife is a nice question that

has given rise to a good deal of debate. The operation on the male is so much simpler, cheaper, and safer than that on the female that it is natural for a husband to have himself sterilized, if his wife should not bear additional children, rather than to subject her to the more severe operation. But if she should die and he should wish to remarry, he would be severely handicapped. For such cases particularly there has been a demand for a reversible operation. that could be undone later if desired.

The problem is perhaps more serious in theory than in practice. Due to the tendency of people to marry those similar to themselves, it will be found in a large proportion of cases that parentage is undesirable on both sides. In such cases, it is ordinarily preferable to sterilize the husband rather than the wife.

Cases in which a healthy husband must protect a diseased wife from pregnancy would seem to be those in which temporary methods of contraception are particularly suitable. Unfortunately, the deficiencies of all contraceptives now known lead to a demand for sterilization of persons whose needs would be much better met by the use of contraceptives. The latter require a certain amount of intelligence, self-control, foresight, and often personal instruction, and while they work

more or less satisfactorily with some classes of the population, they are far from satisfactory in many families where they are particularly needed. If further research develops a more satisfactory contraceptive, less will be heard from men who, under present circumstances, are having themselves vasectomized.

EFFECT ON MAN'S HEALTH

Finally, one cannot discuss the personal aspects of sterilization without asking whether the types of operation now in use have any effect on the health of the patient.

It is hard to see why any one should expect that the simple operation of sterilization, which does not alter any internal secretions, remove any organs, or even change the blood supply of any part of the body, should have a curative effect for anything, unless purely as the result of mental suggestion. Nevertheless, some early California and Indiana records assert that the patient was quieter, more easily managed, less erotic, less subject to hallucinations, less frequently seized by epileptic fits, and the like after the operation, and some of the earlier institution operators had no doubt that it did produce a desirable result. Indeed, some of the earlier laws state as one of their objectives the relief or cure of

the condition of the patient—whatever that may be.

The question is made the more interesting because vasectomy has been advertised widely during the past decade as a "rejuvenation" or "reactivation" operation. On theoretical grounds some experimenters on lower animals concluded that shutting off the vas and thereby causing a pressure in the testicle ought to cause an increased production of sexual hormone. After preliminary experiments on lower animals, E. Steinach took up the operation on man which is now associated with his name. The first of his now celebrated "rejuvenation operations" was done for him by Robert Lichtenstern on November 1, 1918, and since then it has been performed on perhaps 1,000 men who have sought to renew their youth. The effect is so potent, according to its advocates, that it is not at all necessary to operate on both testicles—one is enough. It is not generally realized by the public that the ordinary form of Steinach rejuvenation operation is in no way different from the operation for sterilization by vasectomy that has been performed on several thousand men in California. It is merely the same thing under a different name.

Whether the effects of the Steinach operation are real or imaginary and, if real, whether they

are due to the supposed cause or to some other, are questions that have been hotly debated and on which the last word has not yet been said. To go into the technicalities of this subject would be out of place here. In the sixty-five operations which we have studied carefully, and which were performed in private practice (see Chapter III), the patient seemed to get "rejuvenation" when he expected it and paid for it; when he did not expect it, and paid merely for sterilization, he got nothing but sterilization. One would suspect from this that any other effect than sterility is a psychic, not a physical, effect. But at any rate, there was no evidence of harm.

Our conclusion is that sterilization of the male should not be looked upon as a cure for anything except the production of undesired children. If this conclusion should later be upset; if it should be shown that sterilization, in certain cases at least, does improve the patient's physical and mental condition; it would certainly be no hindrance to the use of vasectomy eugenically.

EFFECT ON WOMAN'S HEALTH

Sterilization of the female has never had the same support, as a method of rejuvenation, that sterilization of the male has had through the influence of the Steinach school; but paradoxi-

cally enough, it shows many more undisputed cases in which the patient has been benefited both physically and mentally.

This, again, is not due to an immediate effect of the operation as such. On the physical side, it is due to the fact that the opening of the abdomen gives the surgeon an opportunity to correct any harmful conditions that exist there; and such conditions, including cysts, tumors, displacements in need of suspension, or a "chronic appendix," are occasional. Their correction, as an incident to sterilization, often produces great relief. The damages of labor can be made good while under ether. Mentally, the woman is frequently benefited by the knowledge that she will not have to face another pregnancy for which she feels herself wholly unfitted. Hence patients often report themselves as greatly improved in health and feelings after sterilization. This, of course, is not to be ascribed to any direct effect of cutting or tying the tubes, since such operation produces no discoverable changes in and of itself. There is no basis for supposing that any woman will be improved in health by sterilization except in the ways mentioned; but these ways are real and of great importance.

SUMMARY

To sum up then, sterilization that is primarily for the benefit of the individual may:

(1) Protect physical health. This applies only to women, since no man's health is impaired, except indirectly, by parenthood; but it is the commonest cause of sterilization of women who are not mentally diseased or defective. The most frequent justification for it is the existence of a bad heart, lungs, or kidneys, which are unable to stand the strain of pregnancy, but there are other special conditions which might likewise require this precaution. The thyroid gland, for instance, is placed under a heavy strain during pregnancy, and enlarges to meet this strain. But if a woman already has an enlarged thyroid, the extra enlargement may be sufficient to damage her own organism.

(2) Prevent mental strain. Some women with weak constitutions suffer a mental breakdown during pregnancy, or after pregnancy; or even because of the fear of pregnancy. Occasionally a woman develops a suicidal tendency during pregnancy; or a mental trend that makes her dangerous, as for example a desire to kill her own children. In such cases sterilization protects against an attack of mental disease almost as effectively as vaccination does against smallpox. The situa-

tion is rarer in men, but some men who come of mentally diseased stock worry enough over the possibility of having defective offspring to make sterilization a useful preventive of a breakdown.

CHAPTER XI

STERILIZATION FOR SOCIAL REASONS

The advantages of sterilization for social reasons have been shown in Part I. The break-up of some families is prevented; a considerable number of individuals are enabled to take an active part in the work of the community, to be self-supporting, self-respecting, and independent, because the possibility of their reproduction has been terminated.

Current proposals offer many widespread extensions of the principle of sterilization for social reasons. A few of the difficulties as well as of the possibilities can be seen from a discussion of these proposals, grouped together for convenience under a few general heads.

SEX OFFENDERS

The idea that sterilization is an appropriate treatment for, or punishment of, sex offenders is largely a survival of the age-old and vindictive custom of castrating such offenders. Some legis-

lators still urge castration; others seem to have seized upon vasectomy as a simpler operation than castration for this purpose, and one that would give society just as much satisfaction.

This notion has no foundation whatever.

In the first place, vasectomy does not "unsex" the individual; it would not deprive him of any of his sexual impulses, or of the enjoyment derived from the satisfaction of these impulses.

In the second place, it is not a punishment.

It is undesirable from every point of view that vasectomy be looked upon as a punishment, for this will militate against its usefulness as a voluntary measure for the relief of society and the individual. Moreover, court decisions (with one exception) have held that vasectomy as a punishment comes under the heading of "cruel and unusual" punishments forbidden by various state constitutions, and have declared such laws invalid.

If vasectomy were in fact a punishment, and a desirable punishment, the thing to do would be to change the constitutions that are construed to prohibit it as "unusual." It might be argued that there is no reason why a modern civilization, based on the progress of science, should condemn as "unusual" and deprive itself of any punishment that had not been discovered by the Anglo-Saxons a thousand years ago; and that to condemn a pun-

ishment merely because it is "unusual" is a reactionary position that implies a medieval outlook on life. But since vasectomy is not a punishment, and by no stretch of the imagination can be made out to be a punishment, it is unnecessary to labor the point.

Eugenics and punishment should not be confused by such crude efforts as are represented by proposals to sterilize criminals for punitive reasons.

SYPHILITICS

A few states have proposed to sterilize syphilitics. At first sight, this appears to argue little faith on the part of the state in its own public-health administrators. Syphilis is an infectious, curable disease; it has sometimes been asked, from the point of view of the public-health administrator, why there is any more reason for sterilizing a man with syphilis than a man with smallpox, typhoid fever, or measles.

When the problem is examined practically, however, the difficulty of curing syphilis, or at least of knowing that one has been able to cure the disease, and the handicaps of the child who is born with congenital syphilis because of an uncured mother (often infected by her husband) are so great that one can make a strong argument

in favor at least of permitting voluntary sterilization of syphilitic persons. Apart from the danger of birth of syphilitic offspring, the frequency of development of general paralysis (paresis) in patients who erroneously thought themselves cured of syphilis, and the complete disability for bringing up children which is entailed by this affection of the nervous system, give additional reason for urging that in some cases syphilitic patients might well be sterilized for the good of all concerned.

CASTRATION

Many proposals in recent times, as in more ancient days, have envisaged the castration of sex offenders. While this is probably largely due to a desire for vengeance, it is often cloaked in the guise of sterilization and of therapeutics.

It is no more desirable, in the interests of eugenics, to use castration under pretense of sterilizing, than it is to use sterilization as a punishment. As for any curative effect that castration might be supposed to have, it is not necessary to invoke a sterilization law if it can be shown that castration is a necessary measure in the treatment of a sick individual.

It is doubtful whether it can be so shown. Whereas castration before the age of puberty

deprives the individual, in most cases, of sexual power, castration of an adult often does not so operate. The sexual inclination and sexual capacity alike are sometimes not much diminished; in exceptional cases they may even be increased. Whatever result is produced is largely due, it appears, to mental effects, and the results of castration in recent times have not yet been studied critically enough to reveal the facts. A number of castrations in Switzerland have been described, and it has been alleged that as a result of the operation a patient who had formerly been unable to live in the community was enabled to go back to a normal social life, avoiding offenses against the law as well as further attacks of mental disease. But it has not been shown that this effect was due merely to the castration, and not to the other treatment given at the hospital. Many patients with similar difficulties who are not castrated but merely given the customary hospital treatment, also recover and can be returned to the community.

Some American states have performed at least a few castrations under their sterilization law, and in two states a majority of the supposedly sterilization operations on males in the past have been castrations. No evidence has been published to show that this was needful.

One might question whether castràtion is indicated in any case, in the light of modern knowledge. Does it attempt to reëducate the patient, to adapt his personality to adjustment in his surroundings, to fit him better for everyday life and its problems? Or does it, after a crude mutilation, leave him worse off in all these respects?

But even if castration is necessary for medical reasons, that is a question that does not concern us here. We believe that the use of castration either as a punishment or as a eugenic measure is medieval, entirely out of line with the true interests of eugenics, and should not be tolerated.

NO ENCOURAGEMENT OF RAPE

Curiously enough, while one group demands sterilization of sex offenders, another group fears sterilization as likely to create more sex offenders.

Will the parole of sterilized males from the mental hospitals tend to foster rape or other crimes of sexual violence? It seems to be assumed that the fact of sterilization will prey on a man's mind until he becomes a rapist. Apart from the fact, which we pointed out in a preceding chapter, that most of the sterilized patients are satisfied with the result, it is difficult to see why sterilization should so affect a man's mind as to lead him to commit rape. The knowledge that his crime

would not lead to pregnancy could not have this effect; for what rapist ever gave thought to this result? The whole idea seems to be a simon-pure bugaboo, raised by those who are prejudiced against the principle of sterilization and cannot find any legitimate argument against it. In the entire history of sterilization in the United States, now covering more than thirty years, we have never heard of a case of rape or other sexual assault that was or could be attributed to the operation. In so far as the mental hospitals get a type of patient that might be, or has been, addicted to rape, such patients are not released until they are believed to be recovered; hence they are much less likely to commit rape after sterilization than before.

Offenses against little girls are most frequently committed by old men who are declining mentally and physically; other sex assaults are most frequently committed by young men, vigorous and relatively intelligent but mentally diseased. We have examined a series of one hundred cases of rape and similar crimes from the Los Angeles county records. While no mental test of the arrested individual was available, the statement of his occupation afforded some indication of his intellectual level. Two-thirds of them fell in the class of skilled labor or above. A study of the

records of individuals committed to an institution for the feeble-minded shows that in the rare cases when they have records of sexual delinquencies, these are likely to be perversions, not crimes of violence. Even if this class were addicted to rape, it is impossible to see why the fact of sterilization should increase the tendency. In the light of these facts, the idea that the sterilization and release of insane or feeble-minded males may lead to an increase in rape and sexual crimes is grotesque.

It is sometimes argued that the sterilization of mentally defective males is without point or purpose. They would not reproduce anyway. In the case of idiots and some imbeciles this may be true; but since the operation is so simple and harmless, the state authorities have preferred to give the public the benefit of the doubt, by sterilizing. The patient undergoes a mere temporary inconvenience; the after effects, so far as he can tell, are nonexistent; and the state is protected.

STERILIZATION OF YOUNG WOMEN

In discussing the sterilization of mentally deficient females, in Part I, we emphasized the fact that these girls are a marrying class. About one-third of them marry within a few years after being placed on parole. It would be impossible to pre-

vent this if they are paroled at all—attempts to prevent it in the unsterilized would lead either to runaway marriages or to clandestine affairs, and in either case would result promptly in offspring, legitimate or illegitimate.

There are three possibilities, then: (1) lock up these girls at least during the reproductive period, which means for a quarter of a century or more; (2) parole them and allow them to reproduce unhindered; (3) parole them after sterilization and allow them to marry.

Each of these three procedures is being followed in various states. The first one is often urged by those who see the undesirability of reproduction but have not seen any other alternative, and who disregard the fact that such a virtual imprisonment is unjust and cruel provided it is not necessary for other reasons.

The second is being practiced, mainly through inertia, in most communities. Although mental defect is ordinarily "incurable," because an inborn condition, the records of institutions for the whole United States show that for every two admissions there is at least one release; in other words, the proportion of paroles among mentally deficient persons is just as great as is the proportion of paroles among mentally diseased persons. And the number released will doubtless increase greatly

in the future, since the parole system for mental defectives is a relatively new development, which many states have not yet put into practice fully.

The third possibility has proved to be satisfactory in California and elsewhere.

Ruling the second procedure out, what girls would not prefer No. 3 to No. 1? From their point of view, there is no room for argument.

From the state's point of view, public welfare is as well protected by No. 3 as by No. 1. Economic interests are furthered, since the girl becomes a producer instead of a consumer. For this class of defective girls—namely, those who are capable of adjusting themselves to the community under supervision, who are not incorrigible, and who are marriageable—there seems scarcely to be room for doubt that sterilization offers a real solution of the problem.

It has been objected that the state has no right thus to "experiment"; that it is known that some of these girls will become delinquent on parole and that all should therefore be kept in segregation to prevent any possible harm.

This would be to inflict a prolonged punishment on the innocent for the benefit of the guilty; moreover, it is impossible to prevent all delinquency and even reproduction. There is probably not an institution in the country that has

not had some escapes, and even if the girl is kept in an institution all the rest of her life, instances are known where she has become pregnant by an attendant. In her own home she is no safer. She is always subject to rape, and, in the lower class of home, to incest, which is common enough among a certain stratum of feeble-minded. To demand that a course be followed which will prevent every conceivable instance of delinquency is therefore a counsel of perfection and is not likely to be followed successfully; and ignores the right of the possible illegitimate and defective child—the right to be not born. The most that can be asked is that the state adopt a course which shall protect the interests of the public as completely as possible, while giving a fair chance to the patients to show whether or not they can adapt themselves to life in the community. Incidentally, it may be inferred from the foregoing that there is sometimes reason for sterilizing a woman, even if the institution does not intend to parole her.

TREATMENT OF MENTAL DEFECTIVES

There have been wide divergences in the attitude taken toward the presence of mental defectives in the community, by those professionally concerned with them. Ten or twenty years ago,

it was urged that all should be segregated for life. They are unable to compete on equal terms with their better endowed fellows, it was argued; it is cruel to turn them out to stand or fall, whether they are sterilized or not. What they need is institutional care.

As it became more and more evident that not enough institutions could be built to take care of all mental defectives, and as it became more and more evident that many of these were getting along successfully on the outside, voices from the other extreme began to be heard. From this point of view, it seemed that there really was no problem of the feeble-minded. All that the so-called feeble-minded need is education suited to their capacities, some vocational guidance so they will get into the jobs for which they are best fitted, mental-hygiene clinics to straighten out their emotional difficulties, and they will get along as well as any one else in the population—maybe better.

As usual, the truth lies between the two extremes. Those who have had practical experience with the subject recognize that the problem is an individual one: since no two individuals are alike, no two require just the same treatment.

Some need institutional care as long as they live. They may be particularly low intellectu-

ally; they may be a little higher intellectually but particularly unstable emotionally. Theoretically, it is conceivable that these emotional difficulties might have been avoided if the child had been trained properly from the day of birth. But who is to train him? His feeble-minded mother? His unstable, perhaps alcoholic or criminal father?

Others, including many of a fairly low level of intelligence, perhaps not more than one-half of the normal, can get along well outside with proper training and some supervision—that is to say, they can be wholly or partly self-supporting, law-abiding, and reasonably happy.

This does not mean, however, that they are not a menace to society, much less that they are any real benefit. Not being recognized by those around them as different in any way from others, they exercise a deteriorating influence on social progress through their frequent inability to conform to its requirements. Standards of personal and social conduct, duties of citizenship, intelligent participation in social welfare—the whole intellectual and civic life of the community with its school standards, its labor efficiency, its problems of unemployment—is complicated by the presence of a large proportion of persons in the community who fall far short of the average capacity to deal with its problems.

EFFECT ON FAMILY LIFE

Is not the present disorganized condition of the family, with its concomitant of broken homes and sexual irregularity, largely due to the mentally unstable, and to the advice and pattern which they give to those who are on the border line between social and anti-social behavior as well as on the border line between intellectual normality and subnormality?

The fact that sterilization keeps families together and prevents broken homes is with some people the strongest argument that can be brought forward in its favor. They may not be used to thinking in terms of eugenics (although there has been a marked change in this direction since the war); but few are deaf to the humanitarian plea, and when the problem is discussed in terms of human misery, it is put in a language that they can understand.

Similarly, and perhaps even more powerfully, the appeal is made to the affected individual. Theoretical and academic interests may not convert, but when, after a father has been sent to a state hospital following years of family agony, the mother says to her offspring, "You must never bring children into the world to suffer what we have all suffered," they feel the force of the argument.

Thus, although the ultimate reason for sterilization is eugenic, the great and more immediate benefits produced in family life may sometimes be the deciding factor in its use.

Is not the presence of a great body of mental defectives in the community a serious addition to this problem? Is not the whole problem of crime complicated by these persons? No matter what miracles one expects to be produced by a few mental-hygiene clinics, or by better education in the elementary schools, it will scarcely be denied that all of the problems mentioned would be easier of solution if the level of the population were raised, in respect of intellect and emotional stability.

This is a good argument for segregation in many cases, but it is also a good argument for preventing the reproduction of the defectives in any feasible way so that, if the burden of the present generation is not much lightened, that of the future may be.

For the sake of economy and the happiness of the individual, it may be desirable to permit those already in the community to remain in it, if they can do so without getting involved in serious trouble. But it is a different thing to argue that society should deliberately perpetuate this condition, by encouraging or even allowing these people

to produce others like themselves. Should it not rather be the policy to seek steadily to raise the level of intelligence and stability of the population? There will still be defectives, but they will be less retarded than the present defectives. There will still be demagogues, but they will address more intelligent audiences. There will still be dependents, but those who must support them will be more competent than at present.

PAROLE

There are several tendencies in the parole of mentally defective persons at the present time.

1. They may be returned to their own homes. By most social workers, this is considered, in general, to be the worst possible solution. If the home had been a fit place for the child, he would not have been taken away from it in the first place. In exceptional cases, parents may be able to afford the special care and help necessary to care for a defective child of a low level in their own home; but this is always open to the objection that the child is then cut off from all associates of his own grade. In most cases, he is better off in an institution.

2. The individual may be put out in some private family that is willing to take the responsibility for him, either as a public service or usually

in return for the work he can do. Boys are placed on farms in this way; girls usually in domestic service; at wages of from $15 to $30 a month and "all found." This system has some admirable features. The objection most frequently urged against it is that, here again, the individual usually lacks adequate social contacts of the right sort for a normal existence. It encourages matrimony, on the part of the paroled individual, for that very reason—the girl seeks the freedom and the escape from monotony that matrimony seems to offer.

Many students feel that the most practicable course may often be to establish industrial colonies where a group of defectives can be paroled together under the proper supervision. Sometimes these perform state work—for instance, a group of able-bodied males in New York has been engaged in reforestation, camping out wherever there was work to be done. For both sexes, however, the tendency is now to establish clubhouses in industrial cities, where the individuals can work at labor for which they are fitted, and where they can be under control outside of work hours, and have some supervised recreation. But if they are in any community, they can hardly be kept from taking part in the normal social life of the community (this, indeed, is one of the chief

arguments in favor of the system); and the natural result will be marriage. Unless the state wants to perpetuate this group, sterilization would seem to be a necessary adjunct to this parole system.

MARRIAGE OF DEFECTIVES

In passing, we note that the states which have adopted laws prohibiting the marriage of the feeble-minded have taken only half a step toward their objective. Such prohibitions do not prevent the feeble-minded from having children. Among one hundred and twenty-five California girls who married after sterilization, for instance, it was found that forty had been pregnant at least once before sterilization. Half of the forty were unmarried; the other half represented pregnancies in marriage but in a majority of cases by other men than the husbands. And these girls were still young; the number of pregnancies would unquestionably have been increased if they had not been committed to the state home. In fact, it was precisely to prevent this that most of them had been committed. California is one of the states which has a law against marriage of imbeciles. Unless it is prepared to lock up all of the female imbeciles at the age of puberty, and keep them there until after the menopause, it must

expect to have them reproducing or else must sterilize them. As a concomitant to sterilization laws, probably all states will have to make provision that certain individuals may marry only if sterilized.

A policy that has often been discussed but, we believe, not yet put into practice anywhere, is to let defectives marry among themselves, and continue to live in segregation. If they are to be kept in industrial colonies during the rest of their lives, it is argued that they would be leading a more normal and happy life if allowed to choose mates from among their number, after sterilization. This is a policy on which the public will doubtless be called to pass judgment in the near future. As the public becomes more accustomed to the idea of marriage after sterilization, it may find this a desirable adjunct to other methods of dealing with those who cannot compete on even terms with their fellow men, who are even a menace to the civilization of their fellows, and who yet, so long as they live, are entitled to humane care.

While two individuals with relatively low levels of intellect but stable, may live a married life that is as normal as that of a large part of the population—even though it does not and is not expected to measure up to the standard of an

ideal mating—the marriage of persons who are unstable or mentally diseased is not likely to turn out well. The necessary adjustment of married life requires a strong, well integrated personality, and the advice sometimes formerly given to hysteric and neurasthenic girls, that marriage would be a cure-all for their condition, is now recognized by most students as bad. It is true, they would have a better chance of succeeding in marriage with sterilization than without it, because their problems would be that much simpler. But under any conditions, marriage must often be discouraged for those who are or have been mentally diseased.

The fact is, nevertheless, that many such persons do marry, and cannot legally be prevented from doing so if they are not legally insane at the time of applying for a license; and that many others do not marry but bear illegitimate children. They are intellectually and emotionally disorganized, and sexual promiscuity is a frequent symptom. There is good reason, then, for sterilizing them before they leave the hospital, at the same time that they are put on parole and the advice given them to avoid entangling sexual alliances is enforced by the supervision of a parole officer.

Throughout the discussion of this subject, it is emphasized by those of experience that super-

vision, not sterilization, is the keynote to the treatment of both the defective and the diseased. Sterilization offers itself, not as a substitute for segregation or parole, but as an adjunct to parole which makes it possible to extend the parole system safely.

COST OF DEFICIENCY

This is not merely a matter of dollars and cents, although that is a large enough item. In spite of the fact that the mentally diseased and defective perform a great deal of labor around their institutions, the cost of keeping a patient in the average state institution runs around $300 per year, and may be much higher—the per capita cost of maintenance of the feeble-minded in Mississippi, according to the special census of 1923, was $714.29 per year. Since the figures which the states publish do not allow for depreciation or for interest on the investment, the true cost is much greater, perhaps averaging $500 per year. On this basis, the 60,000 mental defectives in institutions cost the taxpayers $30,000,000 a year in direct outlay. The loss of their earnings must also be taken into account, and balanced against the relief which they were receiving from charities before commitment: it is impossible to make a guess at the amounts last named and for the pres-

ent purpose it may be assumed that they cancel each other. The work they do in institutions also has a money value that can not be calculated readily. But when it is remembered that the taxpayers are providing $30,000,000 a year to take care of not much more than one in a hundred of a given group, one cannot help wondering what would happen if an attempt should ever be made to take care of the whole group in the same way.

Extension of segregation in colonies could be made much cheaper than this; it is even conceivable that such a colony could become self-supporting, although this will not often occur. There is not much evidence, in a broad survey of the United States, of any diminution in the expense of caring for patients in institutions.

If it were merely, as it has been in the past, a question which is the cheaper, to support a feeble-minded couple in the institution throughout their lives, or to support their offspring in one way or another all *their* lives, there would be no room for hesitation about segregation. But sterilization allows a selected class to be restored to the community, to make its own way with no more cost to the community than is involved in effective supervision. It is not, of course, and never has been, a question of sterilizing and turning loose the lowest types, to stand or fall, with the

full knowledge that they will probably fall. It is a question of giving those who can probably succeed a chance to show, under the most favorable auspices possible, whether or not they can. It is difficult to tell in advance which patient will succeed and which will fail on parole. Success has been found to have little relation to the level of intellect (above a certain minimum, of course), or the length of time spent in the institution, or the nature of the family history. It is largely a matter of personality, as measured by such traits as willingness to submit to discipline, ability to coöperate, a certain measure of self-control, and persistence. Serious delinquency prior to commitment proves to be the principal factor associated with failure on parole, but even this is not associated very closely, some of those with the worst previous records making conspicuous successes under proper supervision. To find who will succeed and who will not, it is necessary to give a group of patients the opportunity; and this opportunity is made possible through sterilization.

CHAPTER XII

STERILIZATION FOR EUGENIC REASONS

THERE remains, then, the principal field for sterilization; namely, the eugenic. Persons should be sterilized if it is to the interests of the commonwealth (or more broadly, of the human race) that they bear no children, or no further children; and if it appears that sterilization is the most effective and satisfactory means of preventing such reproduction.

More specifically, sterilization is justified (1) if mental disease and defect are a menace to the state, (2) if they are perpetuated by heredity, and (3) if sterilization seems to be the most effective means available for dealing with them, or with certain aspects of them.

1. CUTTING OFF BAD HEREDITY

Sterilization primarily for the benefit of the state may prevent the birth of offspring who would have such bad heredity that they would be a burden to themselves, to their families, and

to the state. There is a large number of conditions that are usually brought under this heading; many of them are relatively rare in the population. They include such definitely inherited defects as amaurotic idiocy, Huntington's chorea, hemophilia, germinally conditioned blindness, and deaf-mutism—unless these are associated with such superior mental traits as to outweigh them, which is rare.

The objection is frequently brought forward that the exact mode of inheritance of most traits in man is still unknown, and that until this is known, society is not justified in subjecting any one to compulsory sterilization.

Such an objection seems captious. The exact mode of inheritance of a trait is a matter of secondary importance. The question of primary importance is simply this: *is it* inherited? If so, then the sterilization of any carrier of that trait will certainly cut off that line of transmission.

But occasionally, it may be objected, one can not even determine whether a given condition is inherited. Is this child mentally defective because he received a bad assortment of genes from his ancestors, or because he met with an injury at birth or had a serious disease in infancy? In many instances no one can say.

It is doubtful whether the situation is really

quite so obscure as this objection makes it out to be; but even if it were, this is no argument against sterilization in cases where there is not this uncertainty. There are many cases at present in which any jury of experts would agree that, beyond a reasonable doubt, the condition is heritable. If such be the case, let the state sterilize. If doubt exists, the compulsory feature of the law need not be invoked; it is better to depend on the voluntary feature. When the actual results are well understood, the great majority of sterilizations will be voluntary. It is not as if there were only a few defectives in the entire country, who would profit by sterilization, and that it was of the utmost importance to hunt each one of these out at any expense, and sterilize. The fact is that there are so many persons who might well be sterilized that the great problem for the next two or three generations will be to find men and money to take care of the most pressing cases. Others may be left until later.

With the steady progress of science, the number who will come under the heading of certainty will increase, and administration of a sterilization law can be modified to include them. At present, if one is rejected as doubtful, half a dozen others are awaiting attention as to whom there can be no reasonable doubt.

It is certainly not necessary to wait until science says the last word, in order to begin a eugenic movement. Science will never say the last word. Action must always be based on the current state of progress. If a man comes forward with a cancer, one does not say to him, "My good man, scientists all over the world are working on the cause and cure of cancer, and within the next generation we will probably know all. Go home, and when we have an exhaustive knowledge of the subject, we will inform you accordingly." The victim will be dead long before the word comes. Even if knowledge of the subject is incomplete, he wants the benefit of whatever knowledge there is. For him it is now or never. Similarly with the diseases of society, better remedies will doubtless be found in the future, but there is no excuse for not applying in the present the remedies that are now available.

Sterilization can be applied safely on the basis of knowledge now in existence. It can doubtless be applied even more intelligently and effectively in the future; but the time to start is now. "To prove that our powers of doing good are limited in certain directions has always appeared to me to be the feeblest of all excuses for neglecting to do such good as is open to us," says Leonard Darwin.

No one has any right to carry the gene of Huntington's chorea or hemophilia into another family; the state might well annihilate such diseases as these just as it has yellow fever. Families that have suffered from them would probably be the first to agree to this, if they were intelligent. Growth of a eugenic conscience and knowledge of human pedigrees would help to make these carriers unmarriageable unless sterilized, hence they would probably welcome sterilization.

Many other rare diseases or defects could equally be eradicated, or at least reduced to negligible proportions. Perhaps a score of eye defects, whose heredity is definitely known, are so serious that they should not be propagated.

MENTAL DISEASES

The most important mental disease is dementia præcox which, apparently starting on a constitutional basis, usually manifests itself about the age of adolescence, and tends to get progressively worse, the patient becoming more and more withdrawn from reality into a world of his own imagination. Cases of dementia præcox make up more than 20% of all first admissions to the psychiatric hospitals of the United States, but because they are, in general, incurable, they tend to accumulate while others leave, so that of the resident patients

in any hospital on a given day, more than 40%, often a majority, have dementia præcox.

Even those who are most anxious to ascribe mental diseases to remediable conditions are for the most part compelled by the evidence to admit that dementia præcox is inherited; that it "breeds true." The individual who is born with a predisposition toward it may do much to avoid or postpone the attack; but the only way in which the predisposition can be avoided is by being born without it, so far as the evidence now available indicates.

The second great group of mental diseases is the manic depressive, which is believed to attack persons of a different constitutional type from the dementia præcox group and, in contrast to the steady deterioration expected of the latter, is characterized by continual swings of mood and frequent remissions during which the individual is relatively well. Whereas the patient with dementia præcox tends to enter a hospital early and to stay there all the rest of his life, the patient with manic depressive insanity is likely to enter at a later age, after marriage; and to be in and out —perhaps more out than in—all the rest of his life. This means that he frequently returns to married life in his own home, with the likelihood that children, or additional children, will be born.

As the predisposition to the manic depressive psychoses seems to be heritable, it is of particular importance that patients be sterilized to prevent reproduction; and in the case of women, sterilization frequently aids the patient to keep out of the hospital a great deal longer, since the strain, anxiety, and fear of perpetuating the disease often precipitate a breakdown which takes the woman back to the hospital.

As the psychopathic hospitals now lay great stress on parole of patients, making it a point to send them home whenever possible, sterilization would seem to be all the more necessary as an adjunct to the treatment of mental diseases.

NO GOOD STOCK LOST

The objection is sometimes made that sterilization may prevent the birth of many really valuable children, whose loss would outweigh the prevention of the birth of a few defective children.

So far as the mentally deficient, at least, are concerned, this objection is imaginary.

But what if sterilization should prevent the birth of a few talented children? The birth of millions of talented children is being prevented every year in different ways, principally through the practice of contraceptive measures by intelligent people. The endeavor to arouse a senti-

mental objection to sterilization by alleging that it may prevent the birth of some genius shows a lack of eugenic perspective.

The first question to be answered is, would the parents who are being sterilized produce a larger proportion of talented children than the unsterilized part of the population? The facts we have given in Chapter VI show that such a question is absurd. They will produce a much smaller, probably a negligible, proportion.

Society must look to the probable, not to the possible, results. If possibility were the sole test of policy, then presumably every one should be urged to marry at the earliest possible age and produce the largest possible number of children, on the supposition that in this way another little William Shakespeare might come to light. In practice, however, society recognizes that the population problem and the problem of producing genius are both a good deal more complicated than that; and there is no need to seek for a reactionary point of view, from which to consider eugenic sterilization.

If the sterilization of defectives helps to reduce the burdens borne by the rest of the population, leaves more room for this part, and makes it more possible for this part to have additional children, it is clear that there will be a net gain in the

production of talent and genius, in addition to all the other gains that will flow from the prevention of human misery.

The objection is sometimes made that sterilization will at least deprive the world of many useful, law-abiding, self-supporting citizens. They may not be brilliant, it is admitted; but isn't there a need for a large proportion of dull people in modern civilization, to do the rough and routine work that the intellectuals are unwilling to do? If the breeding of all the morons is stopped, who will dig the sewers and collect the garbage?

Fortunately or unfortunately, there is no possibility of stopping the production of morons altogether. Many of them are born in families of normal intelligence, simply through an unfavorable combination of the genes which carry the heredity. There will always be enough of them produced to dig sewers and collect the garbage, without encouraging the reproduction of people who are likely to produce only morons.

STERILIZED MARRIAGES

It is sometimes urged that the marriage of sterilized defectives automatically sterilizes an equal number of non-defectives; namely, their mates. It is all very well to sterilize a feeble-minded girl, but if she is allowed to marry, the potential

reproduction of her husband, which would probably have been normal, is also prevented.

It is true that his reproduction is prevented: it is doubtful whether this represents any great loss to mankind. The kind of man who will marry a girl of this type is not likely to be of the greatest eugenic value; and if he had not married this sterilized girl, it appears that he might well have picked out some unsterilized girl of the same order of endowment. If so, the sterilization is advantageous to society. No one will deny that through the marriages of these sterilized girls, a certain number of normal children of their mates are lost; but in a society where quantity of population is no longer a serious problem, but quality a tremendous one, it is doubtful whether any candid critic will think the state is seriously impaired by the result of the sterilizations.

Concealment of the fact of sterilization from a mate would, of course, be ground for annulment of marriage.

In pondering on the possible normal individuals lost through sterilization, one must not lose sight of the certain undesirables that are cut off, or might have been cut off, by sterilization.

To take a concrete illustration, a woman who was formerly an inmate of the California state home for the feeble-minded was released, in an

earlier administration, without sterilization. Later she gave birth to three children. One of these returned subsequently to the home as a patient, another became a criminal who had to be supported by the state; the third became a prostitute, who was supported by society indirectly if not directly. The sterilization of the original defective would have spared society the expense of supporting her three offspring. But only a persistent campaign to eradicate defective strains of germ plasm from the population would eliminate the whole clan to which these persons belonged.

It is therefore necessary, in considering the results of sterilization, to distinguish between the effects of cutting off the reproduction of given individuals—effects which are definite and easily understood; and the effects likely to be produced on whole strata of the community—effects which are more remote and not easily comprehended. The former effects are properly subject for prediction as to what may be accomplished. The latter effects are more difficult to estimate.

2. Cutting Off Carriers of Defects

Sterilization may prevent the birth of offspring who, whatever their own traits, would probably be the carriers of undesirable genes which they would pass on to posterity. This includes the

apparently healthy offspring of persons with such diseases as have been mentioned earlier in this chapter. In the average mating, probably not more than one-half of the offspring of a parent with Huntington's chorea will themselves have Huntington's chorea. But some or all of the unaffected children will be carriers of it and thus spread this serious and incurable defect further throughout the population. Unless the quality of the offspring is so high that their loss would more than counterbalance the spread of those undesirable genes, the state is justified in cutting off that line of descent, even if some of the children would be normal to all appearances.

The same argument applies to mental diseases. It is calculated that only about 10% of the offspring of a man with dementia præcox will themselves ever have dementia præcox; only about 30% of the offspring of a man with manic depressive disturbances will themselves suffer from the same disturbances. But the rest of the children will carry some of the inherited elements that, brought into the right combination in a following generation, will again produce a breakdown. It has even been argued that these carriers of the defect who themselves do not show it may in the future be looked on as the most suitable candidates for sterilization. They are the ones

who are impairing the germ plasm of the race by scattering through it the genes responsible for mental disease. But at the present time, compulsory sterilization at least will take account only of those who themselves are victims of disease.

3. Cutting Off Underprivileged Children

Sterilization may prevent the birth of offspring who, whatever their quality, would be brought up in such a way that they would never have a chance in the world; that they could not expect to have normal, healthy, happy lives. Many persons feel that the state should not allow a normal child to be brought up by a mentally defective or mentally diseased parent. Yet the state cannot take all such children away from their parents and bring them up as orphans, as Plato would have had it; and if it could do so, experience everywhere shows that the state as a foster mother is almost worse than no mother at all. The conclusion seems to be that in cases where parents cannot give children a fair chance these parents should not have children.

The grounds most frequently advanced for sterilization—namely, mental disease or mental defect—fall under all three of the heads that have been enumerated. If the condition is inherited,

then the state is interested in preventing the birth of children who will also show it; or even of children who, though themselves apparently normal, will transmit the trait to their descendants. Even if the condition is not inherited, or if there is some doubt on this point, children are still undesirable for reason No. 3 just mentioned.

Epilepsy is often mentioned as one of the traits which particularly requires sterilization. As a fact, the importance of inheritance in connection with this group of diseases, the number of whose victims in the United States is sometimes put as high as 500,000, is becoming more and more disputable; but apart from the possibility of transmitting the defect to posterity, it is clear that a markedly epileptic parent is ill adapted to bringing up children successfully, both on the children's account and on his or her own account.

COST OF MENTAL DISEASE

It costs at least as much to maintain a mentally diseased person in a state institution as it does a mentally deficient one. If the total charges be figured at $500 per year, taking an average throughout all the forty-eight states, then the 300,000 patients in the hospitals present a bill to the taxpayer of $150,000,000 a year, and even if many of them pay part of their upkeep, this

ultimately has to come out of the public wealth. To this must be added the loss of earnings of the patients—an unknown sum, but if it be put down merely at $1,000 a year, which is less than the pay of a day laborer, the total becomes staggering enough.

It can be figured in various ways: H. M. Pollock has based a calculation on the number of new admissions every year; that is, those who have never been in a hospital for mental diseases before. This number is approximately 80,000, and taking into account the probable length of life of one of these patients and the diminution or disappearance of earning capacity following a severe mental breakdown, he estimates that the total loss of earning capacity during the rest of the life of that patient could be put conservatively at $6,000. For 80,000 patients each year, this makes an annual economic loss of $480,000,000 on account of institutional patients, to be added to the $150,000,000 actual maintenance charges. With such figures to start from, one is not surprised to find that more beds are already occupied by mental cases than there are in all the other hospitals of the United States put together; that the states which are making most adequate provision for their mental cases (defective and diseased alike) are paying out a larger proportion

of their income each year on this account than on account of any other item of the budget except education; and with the steady increase both in the number and in the expense of the mental cases, it will not be long before this will actually be the largest single item of expenditure, in states which take their responsibilities seriously.

The United States is already well within sight of a billion dollar annual budget for the insane and feeble-minded, when all the items of maintenance are taken into account—though without taking account of any of the almost fantastic costs of crime, to which these two groups contribute more than a proportionate share.

WHAT CAN BE ACCOMPLISHED

It goes without saying that in the present knowledge of heredity, and for an indefinite time to come, it will be impossible completely to eradicate such a disease as dementia præcox, or such a condition as mental deficiency. For every one who is manifestly affected there are many others, seemingly normal, who carry some of the inherited elements that, in the right combination at some future mating, will again result in a defective child.

This, again, is no reason for not doing whatever is possible to purify the race. Moreover, by cut-

ting off the affected alone, more rapid progress can be made than is sometimes thought. By sterilizing all mentally defective persons, the production of mentally defective persons would not be stopped, for many would still be produced from apparently sound parents; but at least the number of mentally defective persons in the community could be reduced by perhaps as much as half in three or four generations.

Something can be done to reach those who are not themselves affected but are the carriers of an unfortunate heritage, through voluntary sterilization in families marked by either mental disease or mental deficiency. But at this stage it is not necessary to worry much about these carriers, since the problem of dealing with those who are actually affected is large enough. The real problem now is to get at all those who are actually affected. This is not so difficult among the mentally diseased, because their own welfare as well as that of their families, and the public fear of them, lead almost all to institutions, either public or private. Sterilization laws in the past have usually applied only to those in public institutions, but it seems to be logical to apply them equally to those in private institutions, and this will doubtless be done in the future, the tendency of recent legislation in the United States being

toward dealing with the whole class of defectives of a given type, or at least bringing them under the provision of the law, even though it is found most convenient for the time being to apply it only to those in public institutions.

But it has already been shown that perhaps one mental defective in eighty gets into a state institution. If sterilization continues to be applied as a eugenic measure, it cannot be long before it will be necessary to reach a larger proportion of the defectives than this. There are at least two simple methods of procedure: first to canvass the relatives of any child committed to a state institution; secondly, to deal with the mental defectives in the public-school system, subsequently also canvassing their relatives for additional cases of mental defect that should receive treatment.

Such procedure could form part of a compulsory program, but equally part of a program of voluntary sterilization. The defective child in the public schools is usually under state supervision anyway until he reaches the age of puberty; if he shows no improvement, he might be sterilized at that age, thereafter being kept under the supervision of a parole system. While this would apparently cost more than the present system of doing nothing, its actual cost would probably be much less, since it would diminish greatly the like-

lihood that the child would in the future be a heavy expense to the taxpayers through delinquency or crime, and through marriage and the production of more defectives.

This would obviate, so far as mental defect is concerned, one of the objections against much of the present practice of sterilization; namely, that it is not applied until after the patient has already produced children. It would not apply so easily to the mentally diseased; but the fecundity of the latter is not so great, on the average, as is that of the mentally deficient, so that the latter probably present the more important problem of the two.

THE EUGENIC PROGRAM

The place of sterilization in a complete program of eugenics is greater than is sometimes admitted. It is usually spoken of as purely a negative measure—it is sometimes described as a hygienic, rather than a eugenic, operation. Its effect will be to prevent the birth of many inferior children; thereby the proportion of superior children born in the population will be increased, if the non-sterilized part of the population continues to reproduce at the same rate as before. This in itself will be a great gain; but it should be still further increased, as we have previously remarked,

because the reduction of the burden of defectives and dependents should permit the eugenically superior part of the population to increase its birth rate rather than merely to keep it constant.

No matter how great a gain may be made in this indirect way, however, no state can feel that it has done its eugenic duty if it has merely passed a law authorizing sterilization. There must also be a positive program for the encouragement of good breeding—this is imperative. Great as may be the effects of sterilization, this measure is valuable largely as a help to, as a means for clearing the way for, a positive program of eugenics. The childless family of good stock is a misfortune not only to that family, but to the nation and to humanity.

Action is the more urgent because it is probable that a satisfactory positive program cannot be put into effect without a negative program to support it; and the longer the application of sterilization is postponed, the more difficult will it be to make a positive program of eugenics work. Even from this point of view, then, in which sterilization is regarded merely as a preliminary to direct measures for encouraging the reproduction of the eugenically superior, it cannot be avoided; and the time to begin it is now.

APPENDICES

APPENDIX I

EUGENIC STERILIZATION IN CALIFORNIA

FOLLOWING is a list of the technical papers which have made public the results of our study of the workings of the California eugenic sterilization law. The present book is based on these papers, to which the reader should turn for the original data, for verification of any of our conclusions, and for citations of other studies in the same field. References are given in Appendix II to other sources of information that may be useful.

1. The Insane. Journal of Social Hygiene XIII (5):257-268, May, 1927, American Social Hygiene Assn., 370 Seventh Ave., New York, N. Y.
2. The Feeble-minded. Journal of Social Hygiene XIII (6):321-330, June, 1927.
3. Success on Parole after Sterilization. Proc. American Assn. for the Study of the Feeble-minded, 51st annual session, 1927, pp. 86-103 (these proceedings comprise the Journal of Psycho-Asthenics, Vol. XXXII); secy. of the assn., Dr. H. W. Potter, Letchworth Village, Thiells, N. Y.
4. Changes in Administration. Journal of Social Hygiene XIII (8):466-477. November, 1927.
5. Economic and Social Status of Sterilized Insane. Journal of Social Hygiene XIV (1):23-32, January, 1928.

6. Marriage Rates of the Psychotic. Journal of Nervous and Mental Diseases, LXVIII (1):17-27, July, 1928.
7. Fecundity of the Insane, Journal of Heredity, XIX (2):73-82. February, 1928. American Genetic Assn., Victor Bldg., Washington, D. C.
8. Menstruation and Salpingectomy Among the Feeble-minded. The Pedagogical Seminary and Journal of Genetic Psychology XXXV:303-311, 1928.
9. Voluntary Sterilization. Proceedings of the 3d Race Betterment Congress, Battle Creek, Michigan, 1928.
10. Attitude of the Patient's Relatives Toward the Operation. Journal of Social Hygiene XIV (5):271-280, May, 1928.
11. Attitude of Patients Towards the Operation. Journal of Social Hygiene XIV (5):280-285, May, 1928.
12. Social and Economic Status of the Sterilized Feeble-minded. Journal of Applied Psychology XII (3):304-316, June, 1928.
13. Marriage After Eugenic Sterilization. Proc. of the 52d annual meeting of the American Assn. for the Study of the Feeble-minded, 1928.
14. The Number of Persons Needing Sterilization. Journal of Heredity XIX (9):405-411, September, 1928.
15. The Law and Human Sterilization. Proceedings of the 51st annual meeting of the American Bar Assn., 1928 (by Otis H. Castle).
16. Sterilization and Criminality. Proceedings of the 51st annual meeting of the American Bar Association, 1928.

17. Effect of Salpingectomy on the Sexual Life. Eugenics I (2):9-23, November, 1928.
18. Effect of Vasectomy on the Sexual Life. Journal of Abnormal and Social Psychology, 1929 (in press).

APPENDIX II

REFERENCES

CHAPTER I

Our paper No. 14 (list in Appendix I). Horatio M. Pollock and Benjamin Malzberg have lately reconsidered the expectation of mental disease (*The Psychiatric Quarterly*, 2(4):549-79, October, 1928) and calculate that "approximately 4.5% of the persons born in the state of New York may, under existing conditions, be expected to succumb to mental disease of one form or another, and become patients in hospitals for mental disease. In other words, on the average, approximately 1 person out of 22 becomes a patient in a hospital for mental disease during the lifetime of a generation. In the several groups shown in the tables the ratios of those becoming patients to the whole population group are as follows: All males, 1 to 21.3; all females, 1 to 22.7; native males, 1 to 23.3; native females, 1 to 25; foreign-born males, 1 to 18.5; foreign-born females, 1 to 19.2." As the state of New York has a larger proportion of foreign-born inhabitants than most other states, its rates of incidence of mental disease are slightly increased by this factor, and the rates in most other states would probably be slightly lower. In the light of the detailed tables presented by Drs.

Pollock and Malzberg, the estimate of 4% given in Chapter I of this book (and based upon earlier studies of Dr. Pollock) appears to be about right.

William F. Ogburn and Ellen Winston have gone over the same data by a different method, with similar results. They find that the chance of being committed to a mental hospital at some time during life is, in the state of New York, for men 1 in 22, for women 1 in 23; in the state of Massachusetts, for men 1 in 16, for women 1 in 19. By study of the army draft records, they find that there are just about as many men, seriously ill mentally affected with psychoses, not neuroses) outside the hospitals as in them; hence they conclude that the real chance of anyone's going insane is at least 1 in 10 at the present time; and they point out that because of the present trend in mortality rates, the chance is likely to become greater rather than less, in the near future. (The frequency and probability of insanity. American Journal of Sociology 34(5):822-831. March, 1929.)

CHAPTER II

An outline of the general history of sterilization, with abundant references to other sources, will be found in Joseph Mayer, "Gesetzliche Unfruchtbarmachung Geisteskranker" Freiburg im Breisgau, 1927, pp. 466; obtainable in the United States from the B. Herder Book Co., 17 S. Broadway, St. Louis, Mo., price, $4.50. (See the review of it in Appendix VIII). The bibliography of this book, comprising thirty-one pages, will be found useful especially in locating German literature, and as a supplement to the extensive references furnished by S. J. Holmes, "Bibliography of

Eugenics," pp. 514, 1924. (University of California Publications in Zoölogy, Vol. 25, price, $5.)

The historian of the progress of sterilization in the United States is Harry Hamilton Laughlin of the Eugenics Record Office (Carnegie Institution of Washington), Cold Spring Harbor, Long Island, N. Y. Dr. Laughlin's book, "Eugenical Sterilization in the United States" (pp. 502), was published as a report of the Psychopathic Laboratory of the Municipal Court of Chicago (December, 1922); it is now out of print, but can be found in many libraries. It contains the text of every sterilization law adopted in the United States, with a full history of litigation concerning it, analyses of these laws from many points of view, and an extended discussion of eugenic sterilization. A supplement to it by the same author, "Eugenical Sterilization, 1926," was published by the American Eugenics Society, 185 Church St., New Haven, Conn., pp. 75, price, 50¢, in which a tabular record of all the legislation in force in the United States and all the operations performed in the state institutions is given.

This legal and administrative history is brought up to date by Otis H. Castle in Appendix IV of this volume. The administrative history of the California law is discussed in our paper No. 4.

CHAPTER III

See our papers Nos. 8, 10, 11, 17, and 18.

CHAPTER IV

See our papers Nos. 11, 13, 17, and 18.

CHAPTER V

See our papers Nos. 3, 9, 10, 11, 13, 17, and 18.

APPENDIX

CHAPTER VI

See our papers Nos. 5 and 12; and for the proportion of men of genius who have been insane see S. J. Holmes, "The Trend of the Race," New York, 1921.

CHAPTER VII

See our papers Nos. 9, 17, and 18.

CHAPTER VIII

See our papers Nos. 15 and 16.

CHAPTER IX

Dr. James Blundell (1790-1878) in a book published in 1825 and entitled "Researches Physiological and Pathological; Instituted Principally with a View to the Improvement of Medical and Surgical Practice," printed as his first essay one entitled "Physiological Observations and Experiments," which was the substance of a paper he had read before the Medico-Chirurgical Society of London in 1823, and in which he said:

"1st. A division of both the Fallopian tubes, and even the removal of a small piece of them, so as to render them completely impervious, a fit addition, apparently, to the Cesarean operation, the danger of which it would scarcely increase. The effect of this operation would be to prevent subsequent impregnation, without, however, destroying the sexual propensities, or the menstrual action of the womb; and as many, besides Mr. Barlow's patient, have, on the Continent, recovered from the Cesarean operation, the possibility of a second need for it should, I think, by all means be precluded. In those cases also of contracted pelvis, in which, notwithstanding the excitement of parturition in the seventh month, it is still necessary to destroy the children, by opening the head,

and reducing their size, in order to bring them down through the pelvis, I think it would not be amiss to adopt this operation in order to produce sterility. An opening, two fingers broad, might be made above the symphysis pubis, near the linea alba; the Fallopian tubes might be drawn up to this opening one after the other, and a piece of the tube might then be taken out. This operation, much less dangerous than a delivery by perforating the head when the pelvis is highly contracted, may, I think, be safely recommended."

The principal steps in the development of modern salpingectomy are given in the following references:

Lungren, S. S. "A case of Cesarian section twice successfully performed on the same patient, with remarks on the time, indications, and details of the operation." American Journal of Obstetrics 14:78-94, 1881. (This Toledo, Ohio, physician tied the tubes with silk to prevent further pregnancy.)

Crimail, A. Abeille Medical, April, 1891. (Report of an operation on February 19, 1891, in which he not only tied the tubes but also cut them, thereby introducing the modern practice of salpingectomy.)

Kehrer, F. A. "Sterilisation mittels Tubendurchschneidung nach vorderem Scheidenschnitt." Centralblatt für Gynäkologie 21:961-965. 1897. (Recommended salpingectomy through the vagina, which is still frequently done.)

Beuttner, O. "Sterilisation mittels Tubendurchschneidung nach Laparotomie." Centralblatt für Gynäkologie 21:1227. 1897. (Recommended the same operation, but entering the abdomen through an incision below the navel, which is now the standard practice.)

The operation is described and illustrated in H. H.

Laughlin's comprehensive book (see note under Chapter II, above) as well as in standard textbooks of gynecological surgery.

Dr. Robert L. Dickinson of New York, secretary of the Committee on Maternal Health and one of the senior gynecologists of the United States, came to California in February, 1928, at the instance of E. S. Gosney, to inspect and report on the medical aspects of sterilization in California and published a preliminary report, "Sterilization without Unsexing," *Journal of the American Medical Association* 92(5):373-9. Feb. 2, 1929, of which a brief abstract is given in Appendix III, since it expresses the views of an observer of unusual experience.

For the X-ray, a comprehensive recent summary is that of Douglas P. Murphy, "Ovarian Irradiation; its effect on the health of subsequent children; review of literature, experimental and clinical; with a report of 320 human pregnancies." *Surgery, Gynecology, and Obstetrics* 47(2):201-215, August, 1928.

Valuable and comprehensive summaries on the whole question of salpingectomy are H. Naujoks, "Das Problem der temporären Sterilisierung der Frau." Stuttgart, 1925 (description of twenty-four different operative techniques), and Ludwig Nürnberger, "Die sterilisierenden Operationen an der Tuben und ihre Fehlschläge." Sammlung Klinischer Vorträge Nos. 731-734 (Gynäkologie Nos. 258-261). Leipzig, 1917.

Experiments in tying off the vas date back as far as 1785 (Brugnone, Opera anatomica, Torina, 1786), but the first operation of vasectomy is ascribed to H. G.

Lennander of Upsala ("Zur Frage der sexuellen Operationen bei Prostatahypertrophie." Centralblatt für Chirurgie 24:617-625, 1897). Dr. Sharp described his own work several times, particularly "Vasectomy as a means of preventing procreation in defectives." *Journal of the American Medical Association*, 53:1897-1902, December 4, 1909. Dr. Robert R. Rentoul of Liverpool (Eng.) was perhaps the most active propagandist for vasectomy in the early years, and contributed many papers on it to medical journals; it is occasionally known as Rentoul's operation for this reason. It is described and illustrated by Dr. Laughlin (see work cited under Chapter II, above) as well as in textbooks of genito-urinary surgery. For the restoration of the vas after operation see Francis R. Hagner, "Sterility in the male, with remarks on operative experience." *Journal of Urology*, 13:377-382, 1925.

CHAPTER X

See our papers Nos. 9, 17, and 18. The experience of German parents who lost an only son during the war is cited by Albert Moll in his Handbuch der Sexualwissenschaften, Vol. II, Chapter VIII: "Der Neumalthismus." Leipzig, 1926. The literature concerning the Steinach operation is so abundant and well known as to need only mention here; the most significant experimental work done on it in America is that of Dr. Carl R. Moore, associate professor of zoölogy, University of Chicago, and his associates; particularly Dr. Robert M. Oslund, associate professor of physiology, college of medicine, University of Illinois.

APPENDIX

CHAPTER XI

See our papers Nos. 3 and 12; also any standard work on eugenics or mental hygiene.

CHAPTER XII

See the standard textbooks of heredity and eugenics. For the merits of orphanages and foster homes, see particularly a study of the State Charities Aid Association (New York), "How Foster Children Turn Out," made under the direction of Sophie Van Senden Theis, pp. 239, Publication No. 165 of the S. C. A. A., 1924.

The authors will be glad to furnish more detailed information about any subject discussed in this book, if they have such information, or to give additional references to sources.

APPENDIX III

SURGICAL ASPECTS OF STERILIZATION IN CALIFORNIA

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(Following is an abstract of the paper presented by Dr. Dickinson before the section on obstetrics, gynecology, and abdominal surgery of the American Medical Association, Minneapolis, June 14, 1928, and printed in the Journal of the American Medical Association. Most of the paper deals with the technique of the operation, and those who are interested in this phase should consult the original. The extracts here presented are the parts of more general interest, together with Dr. Dickinson's summary.)

Sterilizing does not involve the removal of any organ or the lessening of sex feeling, by the methods now generally employed. A categorical statement to this effect is necessary, even in a medical article, because of the fixity of the popular belief that mutilating operations are required which result in radical changes in appearances, sensations, and behavior. Actually, the importance for bodily function of a sex gland is not hurt by closure of the minute exit for its products. Tying the vas just above the testis shuts off a vital but very small portion of the bulk of the seminal fluid. Blocking the bristle-sized passage of the Fallopian tubes leaves an almost microscopic egg to shrivel. The first takes five minutes under local

anesthesia, in skilled hands; the second may prove to be no more complicated when reduced to an office method, although it is usually done by opening the abdomen. Sterilization by closing the ducts may be an additional step in other operations, as on the prostate, at cesarean deliveries, or in fastening up a prolapsed uterus. Sterilization is, of course, produced when the uterus, both ovaries, or both tubes are removed for tumor, or for disorders otherwise incurable.

When a lawmaker asks a doctor, or when a legislature asks a state medical society, for advice on sterilization of the unfit, is an answer ready? It is not. If an answer is made, it can only be of that guess stuff called opinion—not facts built on follow-up, not technique compared and put to test. Yet, as to time, two decades should suffice; as to experience, there have been ten thousand operations in over twenty states. Shall the surgery of this problem constitute one more of our fields to be studied by lay groups because medicine has neglected to carry it through?

The whole question calls for complete investigation of methods, results, and needs. On the social and legal side, and incidentally the medical, the Eugenics Record Office, at Cold Spring Harbor, has done pioneer service, and for the past ten years this has been headed up by the studies of the Assistant Director, Dr. H. H. Laughlin.[1, 2]

[1] Laughlin, H. H., "Eugenical Sterilization in the United States," Chicago, Psychopathic Laboratory of the Municipal Court, 1922, 502 pp.

[2] Laughlin, H. H., "Eugenical Sterilization, Historical, Legal and Statistical Review," 1926. American Eugenics Society, 1926.

For five years the Committee on Maternal Health has included the question of sterilization, both therapeutic and eugenic, in its study of the medical aspects of human fertility. Within the past year we had completed the card index of the literature and abstracting of all important papers, together with the collection of monographs. For this work our location in the Academy of Medicine is particularly favorable. In 1926, on a European trip, the Secretary searched for material in a large number of countries and obtained verbal appraisal of the multiple methods from leading gynecologists. Attention has also been given to the anatomical features, with search of museums and atlases.

The voluminous literature is based upon scanty experience in any one place. For this reason, the Committee particularly welcomed an opportunity to see at close range the unpublished work of California, where more elective sterilization has been done than in all the rest of the world together. Here, public opinion made its choice twenty years ago between lifelong segregation at the expense of the community, and sterilization for those mentally afflicted or defective who are yet able to support themselves or whose families are able to care for them.

A far-sighted citizen, Mr. E. S. Gosney of Pasadena, has organized a survey of the results thus far obtained, which has been under way for nearly three years, financed and directed by Mr. Gosney himself, with the collaboration of an advisory committee made up of men peculiarly well qualified in many different lines. The field research is in the charge of Mr. Paul Popenoe, a biologist who has specialized in the

field of heredity and eugenics. The findings, relating to almost every aspect of sterilization, both compulsory and voluntary, are in process of publication, first, in journal form in a series of twenty-odd technical papers, and later in one or more volumes.

During February, 1928, at Mr. Gosney's request, and at his expense, and through the courtesy of the superintendents of the institutions, I visited California state hospitals to report on the procedure of the medical decisions and on the technique of the surgery.[3] The serious consideration given to the individual patient and the skill in operative work seem to me to make the experience in this state very weighty evidence on the whole problem. In this abridged report, only a brief comparison can be made of methods observed and of suggestions submitted. The entire subject is, however, of such import that an outline of past experience is included, as drawn from our abstracts of the extensive literature. There is adequate material for a book.

[3] In all, ten hospitals were visited, six of them being state institutions for the insane and feeble-minded; also six outpatient services and two medical schools. Staff conferences on patients were attended at four of the eight hospitals. Full notes were made on the eleven sterilization operations witnessed, as well as on insufflation tests for twenty-one patients, and on the sixty-eight patients examined or studied at close range. With doctors and others qualified to express opinions, sixty-two interviews were obtained, the whole covering twenty working days. Two days each were given to Stockton, Sonoma, Napa, and Norwalk. Those hospitals where somewhat fewer operations were done had shorter visits and one which refers patients for operation was omitted.

APPENDIX

STAFF CONFERENCE ON PATIENTS

In the California state hospitals, after a patient has been studied, his case is taken up by the full staff at a regular weekly or semi-weekly staff meeting, called a "clinic." The family record, the judge's report with its opinion from two doctors, and the new hospital history are read in detail by the physician in charge, together with the findings on physical, mental, and laboratory examination. The patient appears and is questioned by several of the six to ten persons present. This proceeding is kindly, with nearly a minimum of the formalities that might frighten or silence him. After his exit the diagnosis becomes a matter of discussion and vote. So does the treatment. I was impressed with the knowledge of the details of each problem on the part of not one alone, but of two or more doctors present, and by the questions put to the social worker or workers sitting in the session, for further items on the patient's relatives and home conditions.

SURGICAL TECHNIQUE

In surgery in general, sterilization is incidental; among the insane and feeble-minded in California, sterilization is the main surgical issue and any general surgery is incidental, and when in these state hospitals one finds a considerable amount of operating in the hands of psychiatrists, two-fifths of it major surgery, naturally the question arises as to its craftsmanship. Speaking as one who has taken detailed notes and made sketches of operations in more operating rooms than any one he hears of, and as far as witnessing ten sterilizations by fourteen operators

may bear evidence, I can only report that the care and dexterity shown by the California surgeons compared favorably with high-grade surgery in active service anywhere. It may be called expert work in a narrow field. Few cases call for complicated surgery; for example, one in twenty-two in a series of 445 abdominal operations by Dr. Covey of Sonoma. As to technique, the healing of wounds in clean cases may be gathered from the same reporter, with primary union in all but 6.5%, and wound infections in 2.2%. This good showing is borne out by the healed wounds I inspected. It is particularly good in view of the way these people handle their dressings and get out of bed. (One woman climbed a tree the day after laparotomy.)

SUMMARY

A personal survey in California institutions shows proper safeguards when advising operations on men and women in order to release them for return to work or to home supervision; also excellent surgical technique, with good results shown by the follow-up. The consideration and pictured details of various operative procedures with their surgical anatomy, as presented, argues for the simplest methods as the best. Low transverse incision is favored by the author. A review of the literature, including the reversible operations and nearly four hundred "rejuvenations," brings up the discususion of non-hospital methods, such as heat to the testis, irradiation of male or female gonad, and intrauterine cautery stricture, chemical or electrical, visualized by the hysteroscope. Stress is laid on testing results by search for spermatozoa in the semen and insufflating the uterine tubes.

APPENDIX IV

THE LAW AND HUMAN STERILIZATION

OTIS H. CASTLE

(The following address of Otis H. Castle of the Los Angeles Bar was delivered at the fiftieth annual meeting of the American Bar Association, at Seattle, Washington, in July, 1928, and published in the Proceedings of that meeting. It is here reprinted verbatim, with the omission of a few paragraphs dealing with matters that have been covered earlier in this book.)

The use of the words "human sterilization" in the title is probably an unnecessary concession to the lawyer's passion for exactness. To every member of this group the word "sterilization" alone would convey the meaning intended. The fact remains, however, that there exist in this country to-day thousands of lawyers to whom it would suggest only such topics as sanitary precautions in restaurants and "a clean towel for every customer."

It means, of course, something vastly more radical, vastly more fundamental, vastly more controversial than that. It means the removal from a human being of his power of procreation by surgical operation under sanction of law. By the scientists it is usually called "eugenic sterilization," but that name empha-

sizes only one of the three purposes for which sterilization laws are sometimes invoked. These are first, penal—a means of punishment of convicted criminals; second, therapeutic—a method of treatment of criminals and mental defectives; third, and probably most important, eugenic—an effort to improve the race by preventing persons likely to become criminals or public charges from being born. Incidental to all of these purposes is the desire to relieve the extreme congestion of our public institutions by making possible the release of certain inmates whose continued confinement would otherwise be necessary.

Sterilization, as has been said, is controversial, and that controversy is frequently conducted on the plane of emotion and prejudice rather than of logic. Even some of the judicial decisions bear marked resemblance to forensic exercises or anthologies of verse. On the one hand the opponents of sterilization feel that the power of procreation is "God given," and that to take it away under any circumstances is in itself little short of criminal and would open the door to all manner of dangerous social experiments. Its proponents, on the other hand, accept the majority dictum of the scientists that tendencies to criminal behavior and to mental and moral defectiveness are in some degree inheritable, and that bad heredity is in itself one of the maladjustments making for antisocial conduct; and they feel that this generation owes a solemn duty to future ones to protect them against the class of people to-day thronging our public institutions. They adopt their slogan from no less an author than Mr. Justice Holmes: "Three generations of imbeciles are enough."

I have been using the word "feel" advisedly, and we as lawyers realize that with respect to such matters it is natural for people to feel, and to feel strongly; but we further realize that it is advisable to think, and highly important to *know*. The future of sterilization as a penal, therapeutic, and eugenic measure can only be gauged in the light of the facts as to the results of its use in the past. It was in this spirit that the intensive study of sterilization in California, of which more will be said later, was undertaken, and it is in this spirit that I ask you to hear a summary of sterilization legislation in the United States. A chronological review is necessary because the statutes differ so greatly in detail as to lend themselves to no form of accurate classification.

The first act was passed by the Pennsylvania legislature in 1905 and was vetoed. On March 9, 1907, a statute was approved in Indiana,[1] providing for "such operation for the prevention of procreation as shall be decided safest and most effective" to be performed upon such inmates of institutions for confirmed criminals, idiots, imbeciles and rapists as should be deemed by a commission of two skilled surgeons, acting in conjunction with the institution physician and board of managers, to be unfit for procreation and improbable of improvement as to mental and physical condition. In 1920 the act was held unconstitutional as violative of the due process amendment of the federal constitution. The court, in a brief decision, emphasized the private nature of the hearings as well as the inmates' lack of opportunity to examine and cross-examine witnesses.[2]

[1] Indiana Laws 1907, chap. 215.
[2] Williams *vs.* Smith, 190 Ind. 526, 121 N. E. 2.

Washington, in 1909, adopted the first and only statute purely punitive in purpose.[3] This provided that "whenever any person shall be adjudged guilty of carnal abuse of a female person under the age of ten years, or of rape, or shall be adjudged to be an habitual criminal, the court may, in addition to such other punishment or confinement as may be imposed, direct an operation to be performed upon such person for the prevention of procreation." The act was held constitutional in 1911, the decision being that vasectomy is not a cruel punishment within the prohibition of the state constitution.[4] In 1921, Washington adopted another statute,[5] with purpose primarily eugenic and secondarily therapeutic, authorizing sterilization of feeble-minded and insane persons, epileptics, habitual criminals, moral degenerates and sexual perverts who are inmates of state institutions, when in the judgment of the Institutional Board of Health procreation is inadvisable and recovery improbable. The order of the Board is required to be served upon the inmate, or his legal guardian, who may appeal to the Superior Court of the county in which the institution is located.

California adopted its first sterilization statute in 1909,[6] enacted a new law repealing the old one in 1913,[7] and amended the act in 1917.[8] The law as it now stands provides for sterilization before discharge, with or without consent, of "any person who has been

[3] Rem. and Bal. Code, sec. 2436.

[4] State *vs.* Feilen, 71 Wash. 65; 126 Pac. 75; 41 L. R. A. (N. S.) 418.

[5] Washington Laws 1921, chap 53.

[6] California Statutes 1909, chap. 270.

[7] California Statutes 1913, chap. 363.

[8] California Statutes 1917, chap. 489.

lawfully committed to any state hospital for the insane or the Sonoma State Home and who is afflicted with mental disease which may have been inherited and is likely to be transmitted to descendants, the various grades of feeble-mindedness, those suffering from perversion or marked departure from normal mentality, or from disease of a syphilitic nature." This provision is purely eugenic, but the act contains a therapeutic provision that whenever, in the opinion of prescribed officials, asexualization will be beneficial to the physical, mental or moral condition of certain recidivists in the state prisons who are also moral or sexual degenerates or perverts, they may order the operation. The act further provides for the sterilization by the state free of charge of any "idiot or fool" with the consent or upon the request of his parent or guardian. California also has in the act establishing the Pacific Colony for epileptics and feeble-minded persons a special provision for sterilization of inmates.[9] The California Penal Code further provides for the sterilization as "additional punishment" of any person adjudged guilty of carnal abuse of a female under the age of ten.[10] The California act of 1909 was held constitutional by Attorney General Webb in a well-considered opinion dated March 2, 1910. The Attorney General intimated that he would have more doubt, however, if castration were used instead of vasectomy.

Connecticut adopted a statute in 1909 which, as amended in 1919,[11] authorizes vasectomy or oophorec-

[9] California Statutes 1917, chap. 776, sec. 42.

[10] California Penal Code, sec. 646.

[11] Connecticut General Statutes, Revision of 1918, as amended by Public Acts of 1919, chap. 69.

tomy of inmates of the state prison and state hospitals for the insane and feeble-minded when a majority of a board of three physicians shall, after examining the physical and mental condition of the inmate and his family history, determine that inadvisability of procreation and improbability of improvement exist. The law was upheld in an opinion rendered by the Attorney General of the State in 1912, on the ground that it is not class legislation and is a proper exercise of the police power in that "society owes to itself the duty of preventing procreation by persons who would produce children with an inherited tendency to crime, insanity, feeble-mindedness, idiocy or imbecility."

In 1911 New Jersey enacted a statute [12] providing for sterilization upon order of a board of examiners of inmates of state reformatories and charitable and penal institutions, including feeble-minded persons, epileptics, rapists, and confirmed criminals. This was held unconstitutional by the New Jersey Supreme Court in 1913, in a case involving an epileptic, as a denial of equal protection of the laws, in that its confinement solely to epileptics who were inmates of state institutions constituted too narrow a classification. The court felt alarm that such a law might prepare the way for further legislation, even to the extent of bringing "the philosophic theory of Malthus to bear upon the police power to the end that the tendency of population to outgrow its means of subsistence should be counteracted by surgical interference." [13]

[12] New Jersey Statutes 1911, chap. 190.

[13] Smith *vs.* Board of Examiners, 85, N. J. Law 46; 88 At. 963.

In Iowa the first act was passed in 1911.[14] It was repealed and a new statute substituted in 1913.[15] This provided for vasectomy or salpingectomy of persons twice convicted of felony or of sexual offenses other than "white slavery" and once convicted of "white slavery." It also authorized sterilization of inmates of public institutions for criminals, rapists, idiots, feeble-minded persons, imbeciles, and other defectives upon the decision of a majority of a board that procreation would produce children with a tendency to disease, degeneracy, or deformity, or that the physical or mental condition of the inmate would be improved thereby, or that the inmate was a sexual or moral pervert. Voluntary sterilization of persons afflicted with syphilis or epilepsy, upon application to the Board of Parole or a District Judge, was also authorized. This act was held unconstitutional by the United States District Court, Southern District of Iowa, Eastern Division, in 1914.[16] This was an action to enjoin the Board of Parole from subjecting a twice-convicted felon to the operation. Only the penal provisions of the statute were involved. It was held first, that vasectomy is a cruel and unusual punishment. The court could see no distinction in this regard between castration and vasectomy, holding that "the purpose, and the shame and humiliation and degradation and mental torture are the same in one case as in the other." The court further held that since there were no provisions for notice or hearing or examination of witnesses on the question of whether the felon had been twice convicted, the act was violative of due

[14] Acts of 34th Iowa General Assembly, chap. 129.
[15] Acts of 35th Iowa General Assembly, chap. 187.
[16] Davis *vs.* Berry, 216 Fed. 413.

process, or, on the other hand, if it should be said that the statute automatically decided that question and nothing remained for the prison physician to do but to execute that which was already of record, then the act constituted a Bill of Attainder in that it inflicted a punishment, namely, deprivation of the right to enter into the marriage relation, for past conduct without a jury trial. The case reached the Supreme Court of the United States in 1917, but inasmuch as in 1915 the Iowa Act of 1913 had been repealed and a new act passed which did not apply to plaintiff, that court held that the question had become moot and reversed the decree granting the injunction and remanded the cause.[17] The present Iowa statute, adopted in 1915,[18] authorizes sterilization of inmates of any state institution who are afflicted with insanity, idiocy, imbecility, feeble-mindedness, or syphilis, with the written consent of the husband, wife, parent, guardian, or next of kin, upon the decision of the superintendent of the institution and a majority of its medical staff that it is for the best interests of the patient and of society.

Nevada, in 1911, passed a purely penal statute.[19] It was held unconstitutional in 1918 by the United States District Court for the District of Nevada as violative of the state constitutional provision against "cruel or unusual punishment," the court distinguishing State *vs.* Feilen, the Washington case, on the ground that there the prohibition was against "cruel" punishment only.[19a]

[17] Berry *vs.* Davis, 242 U. S. 468.
[18] Acts of 36th Iowa General Assembly, chap. 202.
[19] Nevada Crimes and Punishments Act, sec. 28.
[19a] Mickle *vs.* Henrichs, 262 Fed. 687.

New York was next to pass a sterilization statute, in 1912.[20] The act authorized sterilization of inmates of state hospitals for the insane and feeble-minded and charitable institutions, and of rapists and confirmed criminals in state prisons and reformatories, upon order of a board of one surgeon, one neurologist and one physician, after examining the mental and physical condition of the subject, his record and family history, the probability of improvement and the advisability of procreation. It was held unconstitutional by the Supreme Court of Albany County on the ground that its limitation to those persons of the classes indicated who were confined in institutions denied equal protection of the laws.[21] The court was evidently influenced by its belief that sterilization has no value whatever, either penal, therapeutic, or eugenic. The judgment of the Supreme Court was affirmed by the Appellate Division,[22] and the case was on appeal therefrom when in 1920 the statute was repealed and the question became moot.

North Dakota has a statute, approved in 1913,[23] for the sterilization of inmates of state prisons, reform schools, schools for the feeble-minded and hospitals for the insane, upon the order of a board after examining the physical and mental condition of the subject, the probability of improvement and the advisability of procreation. Voluntary sterilization upon written consent is also authorized.

Kansas, in 1913, adopted a sterilization statute [24]

[20] New York Laws 1912, chap. 445.
[21] Osborn *vs.* Thomson, *et al.*
[22] Osborn *vs.* Thomson, 169 N. Y. Sup. 638.
[23] N. D. Laws 1912, chap. 56.
[24] Kansas Session Laws 1913, chap. 305.

which it repealed by the substitution of a new one in 1917.[25] The act applies to inmates of state hospitals for the insane, epileptics or feeble-minded persons, and of the state school for girls, and of the state prison and reformatory. The operation is performed upon the decision of the chief medical officer and the governing board of any such institution and the Secretary of the State Board of Health that the mental or physical condition of an inmate would be improved thereby, or that procreation by such inmate would be likely to result in defective or feeble-minded children with criminal tendencies, and that the condition of such inmate is not likely so to improve as to make procreation desirable.

Wisconsin also adopted an act in 1913 [26] providing for sterilization of inmates of all state and county institutions for the criminal, insane, feeble-minded, and epileptic. A special board is appointed by the State Board of Control to "take evidence and examine" into the mental and physical condition of such inmates, and if in a given case it decides that procreation is undesirable, the operation may be authorized by the Board of Control.

1913 was also the year of adoption of the first statute in Michigan.[27] The act applied solely to institutional inmates, and upon the ground that this was an unjustifiable sub-classification of the persons to whom it might normally apply, it was in 1918 declared unconstitutional as a denial of equal protection of the laws.[28] The decision followed and relied upon Smith

[25] Kansas Session Laws 1917, chap. 299.
[26] Wis. Laws 1913, chap. 693.
[27] Michigan Public Acts 1913, Act 34.
[28] Haynes *vs.* Lapeer, 201 Mich. 138, 166, N. W. 938.

vs. Board of Examiners, the New Jersey case. Michigan adopted a second statute in 1923 [29] which, as amended,[30] applies to idiots, imbeciles, and the feeble-minded, but not the insane, both within and without the state institutions. A board of three physicians examines the subject and the court may order sterilization of an adjudged defective whenever at a hearing it is found that procreation by such defective is probable and would produce children with an inherited tendency to mental defectiveness whom such defective would not be able to support, and that there is no possibility that the condition of such defective will improve so as to make procreation advisable. Voluntary sterilization of adjudged defectives upon order of court, and with the consent of parents or guardians, is also provided for. This law was held constitutional in 1925 by a court divided five to three as a proper and reasonable exercise of the police power, justified by the findings of biological science, with results beneficial both to the subject and to society, affording equal protection of the laws, and not violative of due process.[31]

Nebraska adopted a law in 1915 [32] for the sterilization of institutional inmates about to be paroled or discharged upon the decision of a medical board that procreation by such inmates would be harmful to society, but only with the written consent of the inmate, or his spouse, parent, guardian, or next of kin.

[29] Michigan Public Acts 1923, Act. 285, sec. 2.
[30] Michigan Public Acts 1925, Act 71.
[31] Smith *vs.* Command (Mich.), 204 N. W. 140, 40 A. L. R. 515.
[32] Neb. Laws 1915, chap. 237.

The New Hampshire statute adopted in 1917,[33] and amended in 1921,[34] is almost identical with that of Nebraska.

Oregon's first statute, dating from 1917,[35] provided for sterilization of feeble-minded, insane and epileptic persons, habitual criminals, moral degenerates, and sexual perverts who were inmates of institutions maintained at public expense, the operation to be ordered when, in the opinion of a majority of the State Board of Eugenics, procreation would be inadvisable and improvement in the mental condition of the subject improbable. In 1921 it was held by the Oregon Circuit Court for Marion County that this act, if confined in its operation to the inmates of certain state institutions, would constitute class legislation and that its procedural provisions failed to afford due process of law.[36] Oregon's second statute,[37] as amended,[38] applies to all "persons" who are feeble-minded, insane, epileptic, habitual criminals, moral degenerates, and sexual perverts, and who are or are likely to become a menace to society, and to persons convicted of rape, sodomy, or the crime against nature, or any other crime specified in Section 2099, Oregon Laws, or of attempting to commit such crimes. The context of the law shows that it is expected to be applied only to institutional inmates. Whenever the State Board of Eugenics deems that procreation by a

[33] N. H. Laws 1917, chap. 181.

[34] N. H. Laws 1921, chap. 152.

[35] 1917 Oregon Session Laws, chap. 279; 1919 Oregon Session Laws, chap. 264.

[36] State Board of Eugenics *vs.* Cline.

[37] Oregon General Laws, chap. 194.

[38] Oregon General Laws 1925, chap. 198.

person of the prescribed class would produce children with an inherited tendency to feeble-mindedness, insanity, epilepsy, criminality, or degeneracy, or who would become a menace or a ward of the state, an operation for sterilization may be performed with the consent of the defective and, in the case of the feeble-minded and insane, with the further consent of his guardian, next of kin or nearest friend. If such consent cannot be had, the operation may be ordered if a court, after a trial, affirms the findings of the State Board. Oregon and Delaware are the two states in which the use of castration has predominated.

The South Dakota statute was adopted in 1917.[39] As amended in 1925,[40] it provides that if a county board of insanity deems it safe for any feeble-minded person to remain at large, he may avoid commitment to an institution by undergoing sterilization. Compulsory sterilization of inmates of the state school and home for the feeble-minded may be ordered by the State Commission for the Control of the Feeble-minded upon a finding of inadvisability of procreation and improbability of improvement.

Montana has a statute, adopted in 1923,[41] providing for voluntary sterilization of hereditary idiots, the feeble-minded, insane, and epileptic who are institutional inmates, with the consent of the next of kin or legal guardian, and without such consent on order of the State Board of Eugenics after a hearing.

The Delaware statute of 1923 [42] provides for ster-

[39] S. D. Laws 1917, chap. 236; Revised Code of 1919, sec. 5538.

[40] S. D. Laws 1925, chap. 174.

[41] Mont. Session Laws 1923, chap. 164.

[42] Del. Laws 1923, chap. 62.

ilization of inmates of institutions for the insane, feeble-minded, and epileptic upon order of the superintendent of the institution and one physician and one alienist appointed by the board having control of such institution, upon examination and decision that procreation is inadvisable.

Now we come to Virginia and to Buck *vs.* Bell, the leading case. The act approved March 20, 1924,[43] recites that the health of the patient and the welfare of society may be promoted in certain cases by the sterilization of mental defectives under careful safeguard; that sterilization may be effected in males by vasectomy, and in females by salpingectomy, without serious pain or substantial danger to life; that the commonwealth is supporting in various institutions many defective persons who, if now discharged, would become a menace, but if incapable of procreating might be discharged with safety and become self-supporting, with benefit to themselves and to society, and that experience has shown that heredity plays an important part in the transmission of insanity, idiocy, imbecility, epilepsy, and crime. Whenever the superintendent of a state institution shall be of the opinion that it is for the best interests of the patient and of society, he may cause the operation to be performed upon inmates afflicted with hereditary forms of insanity that are recurrent, idiocy, imbecility, feeble-mindedness, and epilepsy, upon complying with certain procedural requirements. These requirements include a hearing by the board of directors of the institution after notice to the inmate and to his legal guardian, and also to his parents, if any, if he be a minor. The

[43] Va. Acts 1924, chap. 394.

evidence is reduced to writing and the right of appeal to the courts from the order of the board is carefully preserved.

Carrie Buck was a feeble-minded inmate of a state institution, the daughter of a feeble-minded mother, and herself the mother of an illegitimate feeble-minded child. The operation was ordered to be performed upon her. She appealed to the Circuit Court for Amherst County, and thence to the Supreme Court of Appeals, which upheld the order and the statute itself, specifically holding that the act provides equal protection of the laws and due process, and does not impose cruel and unusual punishment.[44] The case reached the Supreme Court of the United States in 1927, and that body, speaking through Mr. Justice Holmes (Mr. Justice Butler dissenting without written opinion), after stating that the procedural phases of the act were clearly sufficient and that the attack was not upon the procedure but upon the substantive law, said:

> We have seen more than once that the public welfare may call upon the best citizens for their lives. It would be strange if it could not call upon those who already sap the strength of the state for these lesser sacrifices, often not felt to be such by those concerned, in order to prevent our being swamped with incompetence. It is better for all the world, if instead of waiting to execute degenerate offspring for crime, or to let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind. The principle that sustains compulsory vaccination is broad enough to cover cutting the Fallopian tubes. Jacobsen *vs.* Massachusetts, 197 U. S. 11, 49 L. ed. 643, 25 Sup. Ct. Rep. 358, 3 Ann. Cas. 765. Three generations of imbeciles are enough.

[44] Buck *vs.* Bell, 143 Va. 310, 130 S. E. 516, 51 A. L. H. 855.

But, it is said, however it might be, if this reasoning were applied generally, it fails when it is confined to the small number who are in the institutions named and is not applied to the multitude outside. It is the usual last resort of constitutional arguments to point out shortcomings of this sort. But the answer is that the law does all that is needed when it does all that it can, indicates a policy, applies it to all within the lines, and seeks to bring within the lines all similarly situated so far and so fast as its means allow. Of course so far as the operations enable those who otherwise must be kept confined to be returned to the world, and thus open the asylum to others, the equality aimed at will be more nearly reached.[45]

The judgment of the Virginia court was affirmed.

The Idaho statute of 1925 [46] applies to all "persons" (the context, however, showing an intent to limit "persons" to institutional inmates) who are feeble-minded, insane, epileptic, habitual criminals, moral degenerates, or sexual perverts, and who are or are likely to become a menace to society. If the State Board of Eugenics deems that procreation by such a person would produce children with an inherited tendency to criminality, or any of the named diseases or defects, and that improvement in the condition of the defective is improbable, sterilization may be performed with the written consent of the defective and, in the case of feeble-minded and insane persons, his guardian, next of kin, or nearest friend. If such consent cannot be obtained, the operation may be ordered by a court of competent jurisdiction.

Minnesota [47] and Maine [48] both adopted acts in

[45] Buck *vs.* Bell, 274 U. S. 200, 71 L. Ed. 1000, 1002.
[46] Idaho Session Laws 1925, chap. 194.
[47] Minnesota H. F. 1925, chap. 154.
[48] Maine Public Laws 1925, chap. 208.

1925 providing for voluntary sterilization of institutional inmates upon order of a board, with the consent of the patient in certain cases, and of his spouse, next of kin, or guardian.

Utah, in 1925,[49] passed a law for the sterilization of any inmate of a state institution who is afflicted with hereditary sexual criminal tendencies, insanity, idiocy, imbecility, feeble-mindedness, or epilepsy, if a special board finds that such inmate is the probable potential parent of socially inadequate offspring likewise afflicted and that the operation can be performed without detriment to his general health.

To summarize the existing legal situation, it may be said that a sterilization law of a penal nature has been held in Washington not to violate a constitutional provision against "cruel punishment,"[50] but in certain Federal Courts such punishment, even though effected by means of vasectomy, has been held to be "cruel and unusual."[51] This question has never reached the United States Supreme Court, not being involved in Buck *vs.* Bell, but it is interesting to note that the Virginia Supreme Court of Appeals in its decision in that case went somewhat out of its way to cite State *vs.* Feilen approvingly and to find that vasectomy is "practically speaking harmless and one hundred per cent safe."[52]

When sterilization laws are invoked as eugenic and therapeutic measures, the present tendency undoubtedly is to hold that, so far as their purpose is con-

[49] Utah Laws 1925, chap. 82.

[50] State *vs.* Feilen, *supra.*

[51] Davis *vs.* Berry, *supra;* Mickle *vs.* Henrichs, *supra.*

[52] Buck *vs.* Bell, 143 Va. 310, 130 S. E. 516, 51 A. L. R. 855, 859.

cerned, they are properly within the police power. The only dissent from this general position is in the New York and New Jersey cases,[53] which are decidedly opposed to the weight of authority. Even when a proper exercise of the police power, however, such a statute must afford equal protection of the laws and due process of law. In Michigan, New York, and New Jersey the limitation of sterilization laws to institutional inmates has been held to be a denial of equal protection of the laws,[54] but the Supreme Court of the United States in a later and more persuasive decision takes precisely the opposite view, characterizing the contention that equal protection is denied in such cases as "the usual last resort of constitutional arguments." [55] This accords with the holding of that court in other cases that a classification is not open to objection from the standpoint of equal protection of the laws, unless it is so lacking in any adequate or reasonable basis as to preclude the assumption that it was made in the exercise of the legislative judgment and discretion.[56]

From the standpoint of due process of law, all that now can be said is that the Indiana Court held the act of that state to be lacking in due process, while the Virginia and United States Supreme Courts held the Virginia statute to afford due process. The Indi-

[53] Osborn *vs.* Thomson, *supra;* Smith *vs.* Board of Examiners, *supra.*

[54] Haynes *vs.* Lapeer, *supra;* Osborn *vs.* Thomson, *supra;* Smith *vs.* Board of Examiners, *supra.*

[55] Buck *vs.* Bell, 274 U. S. 200, 71 L. Ed. 1000, 1002.

[56] Stebbins *vs.* Riley, 286 U. S. 137, 143; 45 Sup. Ct. 424; Graves *vs.* Minnesota, 47 Sup. Ct. 122; Swiss Oil Corp. *vs.* Shanks, 47 Sup. Ct. 393.

ana statute contained virtually no provisions for trial, examination of witnesses, or appeal, while in the Virginia act such provisions were rather full. The statutes of most of the other states occupy a middle ground. Precisely where the line of lawfulness will be drawn is undetermined.

Nineteen states to-day have sterilization laws in good standing. Such laws in four other states have been held unconstitutional and have never been amended to meet the objections of the courts. Of the existing laws, three have been adjudicated and held constitutional and the others have not been litigated, although the constitutionality of several has been upheld in opinions by the attorneys general of the states concerned. The motive or purpose of eleven laws is both eugenic and therapeutic, of six purely eugenic, and of two eugenic, therapeutic, and penal. Seven statutes provide both for voluntary and compulsory sterilization, seven for compulsory sterilization only, and five for voluntary sterilization only, that is to say, sterilization with consent. At least five states prohibit unauthorized operations, except as a medical necessity, this type of legislation being similar to that providing for therapeutic abortions. Eight thousand five hundred and fifteen operations had been officially performed under the various sterilization laws in the United States prior to January 1, 1928, and of this total number 5,820 were in California.

The decision of the Supreme Court in Buck *vs.* Bell, together with the making available for the first time of the results of the important California experience, will doubtless greatly stimulate sterilization legislation. Indeed, new bills of this character are now

pending in state legislatures. For this reason certain suggestions and recommendations may be in order.

(1) The investigation seems to establish that vasectomy and salpingectomy have no practical value as punishment pure and simple. If adopted as a penal measure, however, such provision should be in a separate act from that authorizing sterilization for therapeutic and eugenic reasons, in order that the latter may not be affected by any decision holding it unconstitutional as punishment. This is not to be construed as indicating an acceptance of the position that penal sterilization is cruel or unusual. On the contrary, this writer believes that the courts will swing to the opposite view, just as they did in the case of electrocution. In the light of the scientific testimony to the contrary, it can hardly be maintained that sterilization is, as a matter of fact, cruel. If the word "unusual" in our constitutions means that forms of punishment may not follow the advance of science, then those constitutions are out of pace with the time.

(2) The state itself should not perform sterilization purely as a therapeutic measure, without the application or consent of the patient or some one legally authorized to speak for him, together with medical opinion indicating the necessity of the operation. It should be noted that sterilization may have therapeutic value from two points of view, the first purely physical, as in the case of women with bad hearts, lungs, or kidneys, and the second psychological, as in the case of women who suffer a mental collapse through fear of pregnancy.

(3) In compulsory eugenic sterilization the first problem is as to the classes of persons to whom it

should be applied. The safest formula is "any case of mental disease or defect which will probably produce incompetent children." The second problem is as to due process. In this regard, the writer believes, many of the states have been unduly lax. The procedural requirements for sterilization of an individual should hardly be less than for his commitment to an institution. There should be a hearing upon notice, with testimony reduced to writing and an opportunity to examine and cross-examine witnesses, and the right of appeal, at least upon questions of law, should be definitely preserved. Certain findings of fact should be necessary in all cases:

(*a*) Reasonable probability of procreation.

(*b*) Reasonable probability that the children will have an inherited tendency to defectiveness.

(4) An important subject which is suggested for further study is that of sterilization by surgeons in private practice, a comparatively widespread procedure. Should it be encouraged, or circumscribed, or left as it is? Should some record, open to proper officials, be required to be kept? As we have seen, at least five states prohibit such operations except as a medical necessity. When performed for such purpose there can surely be no objection to them anywhere, nor can there be when they are done pursuant to a court order based upon a finding of desirability. But how about the case of a man who, in the absence of any medical necessity, requests a surgeon to sterilize him, either because he realizes that he is eugenically unfit to be a father, or because he cannot assume the economic burdens of parenthood, or because he desires to be safely promiscuous? What should be the public

policy in such cases? And what is the liability of the surgeon to the patient or to his wife or guardian? Here is food for thought.

This paper has been intended as a work of information rather than of propaganda, and I thank you for its reception in that spirit.

APPENDIX V

OUTLINE OF A STATE LAW PROVIDING FOR STERILIZATION

Because of the wide differences among American state constitutions, we do not attempt to offer a form of statute ready for presentation to a legislature. Such a form could not possibly fit the local conditions of forty-eight states, and would therefore have to be redrafted for each one.

In Appendix IV Mr. Castle has outlined the principal matters requiring attention in such a law, from a legal point of view. Sterilization is too new to have found its place in jurisprudence; in some jurisdictions it is not mentioned at all, and in the states where it has received any attention, this has been of the most casual and superficial sort. In the fundamental legal aspects, Mr. Castle has carried the discussion as far as is now possible.

It may be useful, however, to make a few suggestions from the administrative and eugenic points of view, for the guidance of those who are interested in the adoption of legislation. The experience of California and other states during twenty years throws some light on the practical problems that arise in connection with any sterilization law.

APPENDIX

COMPULSORY STERILIZATION

1. Some central administrative board should be designated to keep record of sterilizations and to pass on all compulsory cases in advance. States which have adopted the "model law" of H. H. Laughlin, or similar legislation, will have a separate State Board of Eugenics for this function. Other states have delegated the duty to the board having to do with mental disease and deficiency, or to the board which controls the state institutions. If it is desired to avoid the multiplication of separate boards, there appears to be no objection at the present time to the course last named; but it is preferable not to leave the whole matter in the hands of a "Commission in Lunacy" or the like, because this discourages voluntary sterilizations by attaching a stigma to them in the minds of the public.

2. While the consent of the patient or his relatives is usually obtainable, the law should include a compulsory provision at least for patients who have been legally committed to public hospitals for mental diseases or deficiency and who are charges of the state. The experience of California shows that this compulsory provision need rarely be invoked, but the ability of the state to operate compulsorily when necessary to protect its own interests against irresponsible persons is a proper safeguard for posterity, has been recognized as such by the United States Supreme Court, and should not be discarded.

3. Such provision should apply to all patients in the state institutions mentioned, at the discretion of the administrative authority (e.g., the medical superintendent) after consultation with his staff.

4. The superintendent or other administrative authority should furnish a written record, containing his recommendation of sterilization, with the reasons, to the state board mentioned in Section 1 above.

5. This board shall notify the patient and his or her nearest of kin, furnishing a copy of the superintendent's recommendation. If no near relative is known, the board shall notify the public defender of the county in which the institution is situated, who shall thereupon act as legal representative of the patient; or in states that have no public defenders, the district attorney, or some other attorney, may be designated. In any event, the procedure in this connection should be laid down specifically and in detail, so that the patient may be protected fully in the constitutional right of his "day in court." Following the presentation of this notice, thirty days should be allowed for an appeal to a court of record, if the patient or his representative desires to oppose sterilization.

6. In such case the court will, after proper procedure, give a hearing on the protest. The patient may allege that the proceedings looking to his sterilization were not in legal form, or that there is some reason which makes sterilization unnecessary—such as incapacity to be a parent because of age or physical disability; or that the evidence that some of his potential offspring would be incompetent is inadequate.

7. If the court, after a hearing, finds that the state's decision to sterilize is justified by the evidence, it will order the hospital to proceed with sterilization. If there is no appeal (and it is only in very rare cases that there will be), the state board will, after

the lapse of thirty days, order the sterilization to proceed. In either case, full records will be filed in the office of the state board (not for public inspection except with proper qualifications).

8. A court decision against sterilization should not be considered a bar to bringing a patient up again for sterilization at some future time, if new evidence or new conditions arise to make the operation seem more desirable.

VOLUNTARY STERILIZATION

In addition to provision for the sterilization of defective and diseased persons who are public charges, there should be specific provision for the voluntary sterilization, at public expense, of other persons whose sterilization is desirable for the protection of the commonwealth. This means simply that public hospitals —state and county—should be specifically authorized to receive patients for this purpose. In the absence of such specific authorization, most institutional superintendents are justifiably reluctant to admit patients for any except therapeutic reasons.

Not only should any man or woman whose sterilization would be advantageous to the state for eugenic reasons have the right to apply for admission to a public hospital on this ground, and if unable to pay the cost have the operation performed at public expense; but in case admission is refused by the superintendent, there should be a right of appeal to the central board mentioned in Section 1 above which, finding that the operation was for the public good, should order the patient received for this purpose. This would prevent the nullification of the law by any

institutional superintendent who did not favor it or who wanted to reserve his space and facilities for other purposes.

It may be well to have this provision for voluntary sterilization contained in a separate statute from that providing for compulsory sterilization of inmates of state institutions for the insane and feeble-minded. This not only has the incidental advantage that if one of them is attacked successfully in the courts because ill drawn, the other will not thereby be invalidated; but it has a more important influence on public sentiment, by keeping compulsory sterilization of the state's charges separated from voluntary sterilization of those who recognize their own unfitness for parenthood, and thereby encouraging the latter by attaching no supposed stigma to their sterilization. The experience of California suggests that the principal development of sterilization during the next generation will be in these voluntary cases, and it is the more important, therefore, to make adequate legislative provision for them at the present time.

This separation of issues applies still more forcibly to sterilization as a punishment. We have insisted in this book that sterilization is not a punishment and that no attempt to use it as such should be made. But if any state does want to apply sterilization to the inmates of its penitentiaries for any other than purely eugenic reasons, a separate law should be enacted for that purpose.

APPENDIX VI

OPERATIONS FOR EUGENIC STERILIZATION PERFORMED IN THE CALIFORNIA STATE INSTITUTIONS UP TO JANUARY 1, 1929.

Institution	*Male*	*Female*	*Total*
So. Cal. State Hospital (Patton)	1,257	544	1,801
Stockton State Hospital.....	979	532	1,511
Napa State Hospital.....	174	427	601
Norwalk State Hospital.....	306	221	527
Mendocino State Hospital.....	123	58	181
Agnews State Hospital.....	10	136	146
Sonoma State Home for Feeble-minded	579	909	1,488
	3,428	2,827	6,255

APPENDIX VII

OPERATIONS FOR EUGENIC STERILIZATION PERFORMED IN THE INSTITUTIONS OF THE UNITED STATES UP TO JANUARY 1, 1928.

State	*Male*	*Female*	*Total*
California	3,232	2,588	5,820
Connecticut	8	150	158
Delaware	57	20	77
Idaho	0	0	0
Indiana	118	2	120
Iowa	43	14	57
Kansas	430	217	647
Maine	0	5	5
Michigan	20	86	106
Minnesota	214	18	232
Montana	20	15	35
Nebraska	109	199	308
New Hampshire	4	42	46
New York	1	41	42
North Dakota	18	15	33
Oregon	179	332	511
South Dakota	0	0	0
Utah	34	30	64
Virginia	1	26	27
Washington	1	8	9
Wisconsin	28	190	218
	4,517	3,998	8,515

NOTES

The above figures were furnished by the state authorities. Six or seven hundred males were sterilized in Indiana, for

eugenic reasons, between 1899 and the adoption of the law in 1907. These are not included in the above figures.

In some states that have no eugenic sterilization laws, some institutions occasionally sterilize on their own responsibility. No count is here made of such operations.

Nevada and New Jersey once had sterilization laws, but never performed any operations under them.

Indiana has not performed any operations since 1909, New York not since 1918. The figures for Kansas are up to June 1, 1928. Idaho and South Dakota are just now starting to put their laws into effect.

APPENDIX VIII

(Reprinted from the *Journal of Social Hygiene*, Vol. XIV, No. 3, March, 1928.[1] Copyright, 1928. The American Social Hygiene Association, Inc., 370 Seventh Ave., New York, N. Y. Publication No. 598.)

A ROMAN CATHOLIC VIEW OF STERILIZATION

GESETZLICHE UNFRUCHTBARMACHUNG GEISTESKRANKER (The Legal Sterilization of the Mentally Diseased). By Joseph Mayer. Freiburg im Breisgau, Herder & Co., 1927. 466 p. (In the U. S. from B. Herder Book Co., 17 S. Broadway, St. Louis, Mo. $4.50.)

This is the most comprehensive work available in any language on the history, theory, and world status of the sterilization of defectives. The bibliography alone occupies thirty-one pages, dealing principally with German writings and thereby supplementing usefully the references supplied in S. J. Holmes' "Bibliography of Eugenics."

But to social hygienists the greatest significance of the book is beyond this. The attitude of the Roman

[1] The American Social Hygiene Association presents the articles printed in the *Journal of Social Hygiene* on the authority of their writers. It does not necessarily endorse or assume responsibility for opinions or statements made.

Catholic Church toward eugenic sterilization has never been defined officially. Dr. Mayer is a Roman Catholic priest, associated with the Institute for Social Work at the University of Freiburg; his book is one of a series edited by the eminent professor of moral theology in the Roman Catholic faculty of the same university, Franz Keller; it bears the imprimatur of their ecclesiastical superiors. Under these conditions, it is a matter of no ordinary interest that the author comes to the conclusion, after an exhaustive examination of the facts and the opinion of the leading Roman Catholic theologians, that eugenic sterilization is, in principle, to be approved in suitable cases; and it is a matter of importance to know what his arguments are.

All moral philosophers, he points out, agree that certain types of individual have no right to marry and that it is the duty of every one to prevent their marriage. Since the development of biology, they all declare emphatically that certain types of individual must likewise be prevented from reproducing. It is recognized that social work tends to perpetuate human defects and that this must be offset by the application of a sound program of eugenics. It is for the church to work to this end; it is for the state to support its efforts to this end.

There remains, then, merely a question of the means to be used. To be approved in principle, sterilization must be shown to be an action good in itself and directed to a good end.

The object, to prevent the reproduction of the psychopathic, is certainly not evil, provided no rights of the individual are contravened and public welfare is

not prejudiced by the action. As to the first, Dr. Mayer shows that the psychopath has, because of his very nature, no right to reproduce. Thomas Aquinas justified taking the freedom or life of a man dangerous to society: the good of all takes precedence of the good of one individual. The angelic doctor even went farther and justified the castration of sex offenders for the public good. Society certainly possesses the right to protect itself by depriving an individual of the possibility of reproduction.

As to the second, the ethical situation is not disturbed, because the psychopath is no part of this situation, in consequence of his inability to reason. Even if he has periods of lucidity, he is still cut off by the lack inherent in his nature. Sterilization cannot affect the personal morality of a psychopath, since from the present point of view he has none (*i.e.*, he is not responsible for his actions).

Through physiological sterility, lowered birth rate, failure to wed, and the like, the mentally diseased tend naturally to self-elimination. Far from being regarded as opposed to God's will, then, means to prevent their reproduction might rather be looked on as in accord with and furthering His will.

The acting will ("only that will is good which intends a good as such") intends the healing of the body, either individual or social, so the act of sterilization is comparable to that of a surgeon who cuts a man's flesh (in itself a bad act) to save his life (a good act). Certainly the healing of the social body is to be regarded as a higher good than the healing of any one individual's body. Sterilization might be compared with vaccination which mutilates a child's

body, produces a fever, occasionally even disability or death, and yet what makes it not only allowable but desirable from a moral-philosophic point of view is that it benefits the social body.

Thomas Aquinas based his justification of capital punishment on the same moral grounds as a private healing operation. If it could be shown that sterilization would be in the long run more effective in reducing criminality than imprisonment is now, then sterilization of criminals would certainly be justified on the same grounds, being a much slighter interference with individual freedom than is beheading.

Sterilization separates sexuality from procreation, which in some connections (*e.g.*, contraception) is not permissible; but the Church has not forbidden therapeutic sterilization and castration. The problem of "double effect" enters here. For example, may a doctor cure syphilis by administering arsenicals which in addition to their immediate healing effect will also have an incidental but perhaps permanent harmful effect on the body? Certainly he may. So, the author thinks, he may sterilize if it is necessary even though he thereby separates sexuality from procreation.

Alfonso of Liguori and other outstanding moral theologians had no word of criticism for the practice, extending through centuries, of castrating boys to provide soprano voices for the Sistine choir; and the Popes throughout the same period approved at least tacitly. When Benedict XIV interfered with this practice he did so in a moderate way, advising his bishops not to eliminate eunuchs from the choir but to avoid making the service seem theatrical. So long as soprano choirs were a desirable part of the service

there was nothing wrong in castrating youths for this purpose. It would be wrong now because the need for such choirs no longer exists.

Only official sterilization is permissible, since only the state itself and not some private individual has the right to decide what the interests of the state are.

Dr. Mayer then considers several points of interest in church administration. He believes that a sterilized person is not ecclesiastically "irregular" unless also impotent. As to whether a sterilized person may marry, the older theologians held that a union is licit if it serves either one of the two principal objects of matrimony—procreation and intercourse. Later there was some division of opinion on this point. But the Church has never refused to marry women who have passed the menopause, or men who because of age, double epididymitis, or other obstacle could not become fathers. So much for the theory. Practice offers no difficulty, since the *Corpus Iuris Canonici* says in case of doubt the union may be allowed; and there is always a doubt as to whether the operation is effective—there have been some failures.

While there thus seems to be no obstacle to the principle of sterilization in Roman Catholic moral philosophy (the author, of course, insists that the question is open so long as it has not been answered authoritatively at Rome), Dr. Mayer feels that in current practice the sterilization that is being done does not meet the necessary requirements because it has not been satisfactorily shown that the well-being of any state is yet menaced by the propagation of its psychopaths, the inheritance of mental diseases is still obscure, the possibilities of segregation have not been

tested sufficiently, and the present technique of sterilization is not perfect and in some cases (X-rays) may even do more harm than good. The Church can be expected to proceed as fast as the facts warrant, for "its ethic, its canon law, and its history show that for centuries it has been devoted to a morally and biologically sound policy on problems of population."

PAUL POPENOE.

APPENDIX IX

THE HUMAN BETTERMENT FOUNDATION

The Human Betterment Foundation was organized by E. S. Gosney in 1928 under Section 606 of the laws of California governing eleemosynary and charitable corporations. Its charter provides for twenty-five or more members who are self-perpetuating and who elect from time to time the board of nine or more trustees who appoint and direct the officers and such committees as are designated to carry on the work of the corporation.

The purpose of this organization is to take over and perpetuate the work summarized in this volume and similar constructive work indicated by the name of the Foundation.

While broad discretionary powers are given to the trustees, Mr. Gosney has emphasized his desire at the present time to work for "the advancement and betterment of human life, character, and citizenship, particularly in the United States of America, in such manner as shall make for human progress in this life. It is not the primary intention to engage in the care of the unfortunate or in any form of relief work, but rather to foster and aid constructive and educational efforts for the protection and betterment of the human family in body, mind, character, and citizenship in this life," since he "believes that there is a broad field

for charitable and eleemosynary activities in the education of the citizens in such practical and important matters as will reduce dependency and the necessity for the usual forms of charity, matters which are at the present time overlooked, neglected, or not generally understood."

This corporation and foundation are not intended as a monument to any person or name. Sufficient funds have been provided and will eventually be placed in trust with the Los Angeles First National Trust & Savings Bank, to carry on the work in as extensive and efficient a manner as in the past under Mr. Gosney's personal direction. No appeal is made to any one for contributions; though if any one who approves the plan desires to make a substantial addition to the endowment, he will be welcomed to the support and direction of it, as aiding to make the work more widely useful.

The Foundation will coöperate, so far as practicable, with any individual or organization in any undertaking that promises results in the same direction. Practical, constructive work for human betterment has been sadly neglected in the past. The field is wide and the possibilities are great.

The incorporators of the Human Betterment Foundation are as follows (the members of the original board of trustees being designated by an asterisk):

*E. S. Gosney, Pasadena
*Henry M. Robinson, banker, Los Angeles
*George Dock, M.D., Pasadena
Herbert M. Evans, professor of anatomy, University of California, Berkeley
Samuel J. Holmes, associate professor of zoölogy, University of California, Berkeley

Rabbi Rudolph I. Coffee, Oakland, California
Lewis M. Terman, professor of psychology, Stanford University
*David Starr Jordan, chancellor, Stanford University
*C. M. Goethe, philanthropist, Sacramento, California
*Justin Miller, dean of college of law, University of Southern California
Charles H. Prisk, publisher *The Star-News*, Pasadena
Rev. Robert R. Freeman, pastor First Presbyterian Church, Pasadena
Rev. Merle N. Smith, pastor First Methodist Church, Pasadena
A. B. Ruddock, philanthropist, Pasadena
William B. Munro, professor of science of government, Harvard University, and Pasadena
John Vruwink, M.D., Los Angeles
Mrs. E. S. Gosney, Pasadena
*Otis H. Castle, attorney, Pasadena and Los Angeles
Mrs. Otis H. Castle
*Joe G. Crick, horticulturist, Pasadena
Mrs. Joe G. Crick
A. D. Shamel, physiologist, Bureau of Plant Industry, United States Department of Agriculture, Riverside, Calif.
Oscar Ford, former mayor of Riverside, Calif.
Paul McBride Perigord, professor of French civilization, University of California in Los Angeles
*Paul Popenoe, biologist, Pasadena

Provision is made in the articles of incorporation and in the state laws governing such organization, for annual reports and general supervision of the corporation by the attorney general and the corporation commissioner of the state of California.

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